

BOWDOIN COLLEGE

CATALOGUE FOR 1992-1993



BRUNSWICK, MAINE

AUGUST 1992

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In its employment and admissions practices, Bowdoin is in conformity with all applicable federal and state statutes and regulations. It does not discriminate on the basis of age, race, color, sex, sexual orientation, marital status, religion, creed, ancestry, national and ethnic origin, or physical or mental handicap.

The information in this catalogue was accurate at the time of publication. However, the College is a dynamic community and must reserve the right to make changes in its course offerings, degree requirements, regulations, procedures, and charges.

Bowdoin College is accredited by the New England Association of Schools and Colleges.

Bowdoin College supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status to provide reliable assurance of the quality of the educational preparation of its applicants for admission.



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College Calendar

1992

August 30, Sunday
August 30–Sept. 1, Sun.–Tues.
September 2, Wednesday

September 3, Thursday
September 28–29, Mon.–Tues.
October 2–3, Fri.–Sat.
October 7, Wednesday
October 9, Friday
October 10, Saturday
October 16, Friday
October 21, Wednesday
October 22–24, Thurs.–Sat.
October 24, Saturday
November 25, Wednesday
November 30, Monday
December 9, Wednesday
December 10–14, Thurs.–Mon.
December 15–22, Tues.–Tues.

1993

January 23, Saturday
January 25, Monday
February 5–6, Fri.–Sat.
March 4–6, Thurs.–Sat.
March 12, Friday
March 29, Monday
April 6–13, Tues.–Tues.
April 11, Sunday
May 7–8, Fri.–Sat.
May 11, Tuesday
May 12–15, Wed.–Sat.
May 16–22, Sun.–Sat.
May 27–28, Thurs.–Fri.
May 29, Saturday
June 3–6, Thurs.–Sun.

191st Academic Year

Rooms ready for occupancy.
Orientation.
Registration. Opening of College Convocation.
Fall semester classes begin, 8:00 A.M.
Rosh Hashanah.
Alumni Council, fall conference.
Yom Kippur.
James Bowdoin Day.
Parents Day.
Fall vacation begins after last class.
Fall vacation ends, 8:00 A.M.
Meeting of the Governing Boards.
Homecoming.
Thanksgiving vacation begins after last class.
Thanksgiving vacation ends, 8:00 A.M.
Last day of classes.
Reading period.
Fall semester examinations.

Rooms ready for occupancy.
Spring semester classes begin, 8:00 A.M.
Winter's Weekend. Alumni Council.
Meeting of the Governing Boards.
Spring vacation begins after last class.
Spring vacation ends, 8:00 A.M.
Passover.
Easter.
Ivies Weekend.
Last day of classes.
Reading period.
Spring semester examinations.
Meeting of the Governing Boards.
The 188th Commencement Exercises.
Reunion Weekend.

1993

August 29, Sunday
 August 29–31, Sun.–Tues.
 September 1, Wednesday

 September 2, Thursday
 September 16–17, Thurs.–Fri.
 September 25, Saturday
 October 8, Friday
 October 13, Wednesday
 October 14–17, Thurs.–Sun.
 October 14–16, Thurs.–Sat.

 October 16, Saturday
 October 29, Friday
 October 30, Saturday
 November 3–6, Wed.–Sat.
 November 24, Wednesday
 November 29, Monday
 December 8, Wednesday
 December 9–13, Thurs.–Mon.
 December 14–21, Tues.–Tues.

1994

January 22, Saturday
 January 24, Monday
 February 11–12, Fri.–Sat.
 February 16–19, Wed.–Sat.
 March 3–5, Thurs.–Sat.
 March 18, Friday
 March 27–April 3, Sun.–Sun.
 April 3, Sunday
 April 4, Monday
 April 13–16, Wed.–Sat.
 May 6–7, Fri.–Sat.
 May 10, Tuesday
 May 11–14, Wed.–Sat.
 May 15–21, Sun.–Sat.
 May 26–27, Thurs.–Fri.
 May 28, Saturday
 June 2–5, Thurs.–Sun.
 June 24, Friday

192d Academic Year (Tentative schedule)

Rooms ready for occupancy.
 Orientation.
Registration. Opening of College Convocation.
 Fall semester classes begin, 8:00 A.M.
 Rosh Hashanah.
 Yom Kippur.
 Fall vacation begins after last class.
 Fall vacation ends, 8:00 A.M.
 Inauguration of Bowdoin Bicentennial.
 Meeting of the Governing Boards.
 Alumni Council.
 Homecoming.
 James Bowdoin Day.
 Parents Day.
 Bicentennial History Institute.
 Thanksgiving vacation begins after last class.
 Thanksgiving vacation ends, 8:00 A.M.
 Last day of classes.
 Reading period.
 Fall semester examinations.

Rooms ready for occupancy.
 Spring semester classes begin, 8:00 A.M.
 Winter's Weekend. Alumni Council.
 Bicentennial Fine Arts Institute.
 Meeting of the Governing Boards.
 Spring vacation begins after last class.
 Passover.
 Easter.
 Spring vacation ends, 8:00 A.M.
 Bicentennial Environmental Institute.
 Ivies Weekend.
 Last day of classes.
 Reading period.
 Spring semester examinations.
 Meeting of the Governing Boards.
 The 189th Commencement Exercises.
 Reunion Weekend. Bicentennial Finale.
 Charter Day, Boston.

1994

August 28, Sunday
 August 28–30, Sun.–Tues.
 August 31, Wednesday

 September 1, Thursday
 September 6–7, Tues.–Wed.
 September 15, Thursday
 September 30, Friday
 October 1, Saturday
 October 7–8, Fri.–Sat.
 October 14, Friday
 October 19, Wednesday
 October 20–22, Thurs.–Sat.
 October 22, Saturday
 November 23, Wednesday
 November 28, Monday
 December 7, Wednesday
 December 8–12, Thurs.–Mon.
 December 13–20, Tues.–Tues.

1995

January 21, Saturday
 January 23, Monday
 February 3–4, Fri.–Sat.
 March 2–4, Thurs.–Sat.
 March 17, Friday
 April 3, Monday
 April 15–22, Sat.–Sat.
 April 16, Sunday
 May 5–6, Fri.–Sat.
 May 9, Tuesday
 May 10–13, Wed.–Sat.
 May 14–20, Sun.–Sat.
 May 25–26, Thurs.–Fri.
 May 27, Saturday
 June 1–4, Thurs.–Sun.

193d Academic Year (Tentative schedule)

Rooms ready for occupancy.
 Orientation.
Registration. Opening of College Convocation.
 Fall semester classes begin, 8:00 A.M.
 Rosh Hashanah.
 Yom Kippur.
 James Bowdoin Day.
 Parents Day.
 Alumni Council.
 Fall vacation begins after last class.
 Fall vacation ends, 8:00 A.M.
 Meeting of the Governing Boards.
 Homecoming.
 Thanksgiving vacation begins after last class.
 Thanksgiving vacation ends, 8:00 A.M.
 Last day of classes.
 Reading period.
 Fall semester examinations.

Rooms ready for occupancy.
 Spring semester classes begin, 8:00 A.M.
 Winter's Weekend. Alumni Council.
 Meeting of the Governing Boards.
 Spring vacation begins after last class.
 Spring vacation ends, 8:00 A.M.
 Passover.
 Easter.
 Ivies Weekend.
 Last day of classes.
 Reading period.
 Spring semester examinations.
 Meeting of the Governing Boards.
 The 190th Commencement Exercises.
 Reunion Weekend.

The Purpose of the College

BOWDOIN COLLEGE BELIEVES strongly that there is an intrinsic value in a liberal arts education, for the individual student, for the College as an institution, and for society as a whole. Historically, the arrangement of courses and instruction that combine to produce liberal arts education has changed and undoubtedly will continue to change, but certain fundamental and underlying goals remain constant.

It is difficult to define these goals without merely repeating old verities, but certain points are critical. The thrust of a liberal arts education is not the acquisition of a narrow, technical expertise; it is not a process of coating young people with a thin veneer of "civilization." That is not to say that liberal arts education in any way devalues specific knowledge or the acquisition of fundamental skills. On the contrary, an important aspect of a sound liberal arts education is the development of the power to read with critical perception, to think coherently, to write effectively, to speak with force and clarity, and to act as a constructive member of society. But liberal arts education seeks to move beyond the acquisition of specific knowledge and skills toward the acquisition of an understanding of humankind, nature, and the interaction of the two, and toward the development of a characteristic style of thought that is informed, questioning, and marked by the possession of intellectual courage. When defined in terms of its intended product, the purpose of the College is to train professionally competent people of critical and innovative mind who can grapple with the technical complexities of our age and whose flexibility and concern for humanity are such that they offer us a hope of surmounting the increasing depersonalization and dehumanization of our world. The College does not seek to transmit a specific set of values; rather, it recognizes a formidable responsibility to teach students what values are and to encourage them to develop their own.

Liberal arts education is, in one sense, general, because it is concerned with many different areas of human behavior and endeavor, many civilizations of the world, many different aspects of the human environment. It seeks to encourage the formation of habits of curiosity, rigorous observation, tolerant understanding, and considered judgment, while at the same time fostering the development of varied modes of communicative and artistic expression. This concern for breadth and for the appreciation of varying modes of perception is combined with a commitment to study some particular field of learning in sufficient depth to ensure relative mastery of its content and methods. In short, a liberal arts education aims at fostering the development of modes of learning, analysis, judgment, and expression that are essential both to subsequent professional training and to the ongoing process of self-education by which one refines one's capacity to function autonomously as an intellectual and moral being.

To achieve these goals, the faculty of the College must strive constantly to live up to their commitment in their course offerings, as must students in their course selections. The commitment is a collective one on the part of the College community. Each of the academic components of the College is under a heavy obligation to make its field of study accessible in some manner to the entire student body and to satisfy the needs of the nonmajor as well as those of the specialist.

The College is not and should not be insulated from the problems of the world. Rather, the College is a collection of people deeply involved in their community, their nation, and their world. When liberal arts education is faithful to its mission, it encourages and trains young people who are sensitive to the crucial problems of our time and who have the kind of mind and the kind of inspiration to address them fearlessly and directly. This is its goal and the standard by which it should be judged.

*A statement prepared by the Faculty-Student Committee
on Curriculum and Educational Policy, 1976.*

Historical Sketch

THE IDEA OF BOWDOIN COLLEGE originated in the years following the American Revolution among a group of men who wished to see established in the District of Maine the sort of civil institutions which would guarantee republican virtue and social stability. In the biblical language of the day, they wished “to make the desert bloom” — the desert in this case being an unruly frontier blessed with splendid harbors, deep uncharted forests, and a rapidly growing backcountry population increasingly skeptical of the political and cultural claims of the coastal elite.

After six years of arguments over the site, a college was chartered on June 24, 1794, by the General Court in Boston, for Maine was until 1820 a part of the Commonwealth of Massachusetts. The college was to be built in the small town of Brunswick, as the result of a geographic compromise between strong Portland interests and legislators from the Kennebec Valley and points farther east. It was named for Governor James Bowdoin II, an amateur scientist and hero of the Revolution, well remembered for his role in putting down Shays’ Rebellion. Established by Huguenot merchants, the Bowdoin family fortune was based not only on banking and shipping but on extensive landholdings in Maine. The new college was endowed by the late governor’s son, James Bowdoin III, who was a diplomat, agriculturalist, and art collector, and by the Commonwealth, which supported higher education with grants of land and money, a practice established in the seventeenth century for Harvard and repeated in 1793 for Williams College. Bowdoin’s bicameral Governing Boards were based on the Harvard model.

Sale of the wilderness lands took longer than expected, however, and Bowdoin College did not open until September 2, 1802. Its first building, Massachusetts Hall, stood on a slight hill overlooking the town. To the south were the road to the landing at Maquoit Bay and blueberry fields stretching toward the Harpswells. To the north was the “Twelve-Rod Road” (Maine Street) leading to the lumber mills and shipyards near the falls of the Androscoggin. To the east the campus was sheltered by a grove of “whispering” white pines, which were to become a symbol of the College. The inauguration of the first president, the Reverend Joseph McKeen, took place in a clearing in that grove. McKeen, a liberal Congregationalist and staunch Federalist, reminded the “friends of piety and learning” in the District that “literary institutions are founded and endowed for the common good, and not the private advantage of those who resort to them for education.” The next day, classes began with eight students in attendance.

For the first half of the nineteenth century, the Bowdoin curriculum was essentially an eighteenth-century one: a great deal of Latin, Greek, mathematics, rhetoric, Scottish Common Sense moral philosophy, and Baconian science, modestly liberalized by the addition of modern languages, English

literature, international law, and a little history. Its teaching methods were similarly conservative: the daily recitation and the scientific demonstration. But the antebellum College had several great strengths. Thanks to bequests by James Bowdoin III, the College had one of the best libraries in New England and probably the first public collection of old master paintings and drawings in the nation. There was a lively undergraduate culture centering on the two literary-debating societies, the Peucinian (whose name comes from the Greek word for “pine”) and the Athenaeum, both of which had excellent circulating libraries. And there were memorable teachers, notably the internationally known mineralogist Parker Cleaveland, the psychologist (or “mental philosopher,” in the language of his day) Thomas Upham, and the young linguist and translator Henry Wadsworth Longfellow (1825).

Finances were always a problem, however, especially following the crash of 1837. The College also became involved in various political and religious controversies buffeting the state. Identified with the anti-separationist party, the College faced a hostile Democratic legislature after statehood in 1820 and for financial reasons had to agree to more public control of its governance. For the most part Congregationalists, the College authorities found themselves attacked by liberal Unitarians on the one side and by evangelical “dissenters” on the other (notably by the Baptists, the largest denomination in the new state). The question of whether Bowdoin was public or private was finally settled in 1833 by Justice Joseph Story in *Allen v. McKeen*, which applied the *Dartmouth College* case to declare Bowdoin a private corporation beyond the reach of the Legislature. The more difficult matter of religion was settled by the “Declaration” of 1846, which stopped short of officially adopting a denominational tie but promised that Bowdoin would remain Congregational for all practical purposes. One immediate result was a flood of donations, which allowed completion of Richard Upjohn’s Romanesque Revival chapel, a landmark in American ecclesiastical architecture. An ambitious new medical school had been established at Bowdoin by the state in 1820 — and was to supply Maine with country doctors for the next century — but plans in the 1850s to add a law school never found sufficient backing, and Bowdoin failed to evolve into the small university that many of its friends had wanted. (The Medical School of Maine lasted until 1921.)

For a college that never had an antebellum class of more than sixty graduates, Bowdoin produced a notable roster of pre-Civil War alumni. The most enduring fame seems that of Nathaniel Hawthorne (1825), who set his first novel, *Fanshawe*, at a college very like Bowdoin. Even better known in his day was his classmate Longfellow, who after Tennyson was the most beloved poet in the English-speaking world and whose “*Morituri Salutamus*,” written for his fiftieth reunion in 1875, is perhaps the finest tribute any poet ever paid to his alma mater. Other writers of note included the satirist Seba Smith (1818), whose “Jack Downing” sketches more or less invented a genre, and Jacob Abbott (1820), author of the many “Rollo” books. But it

was in public affairs that Bowdoin graduates took the most laurels: among them, Franklin Pierce (1824), 14th president of the United States; William Pitt Fessenden (1823), abolitionist, U.S. senator, cabinet member, and courageous opponent of Andrew Johnson's impeachment; John A. Andrew (1837), Civil War governor of Massachusetts; Oliver Otis Howard (1850), Civil War general, educator, and head of the Freedmen's Bureau; Melville Fuller (1853), chief justice of the U.S. Supreme Court; and Thomas Brackett Reed (1860), the most powerful Speaker in the history of the U.S. House of Representatives. John Brown Russwurm (1826), editor and African colonizationist, was Bowdoin's first African-American graduate and the second African-American to graduate from any U.S. college.

The old quip that "the Civil War began and ended in Brunswick, Maine," has some truth to it. While living here in 1850–51, when Calvin Stowe (1824) was teaching theology, Harriet Beecher Stowe wrote *Uncle Tom's Cabin*, some of it in her husband's study in Appleton Hall. Joshua L. Chamberlain (1852), having left his Bowdoin teaching post in 1862 to lead the 20th Maine, was chosen to receive the Confederate surrender at Appomattox three years, and six wounds, later. But the war had little immediate impact on the College, other than a slight decrease in undergraduates and a steady increase in medical students.

The postwar period was a troubled one for Bowdoin. The Maine economy had begun its century-long slump, making it difficult to raise funds or attract students. The new and less expensive University of Maine, with its practical curriculum, made a traditional liberal arts college like Bowdoin seem hopelessly out of date. As president, Chamberlain tried to innovate — a short-lived engineering school, a student militia to provide physical training, less classical language and more science, even a hint of coeducation — but the forces of inertia on the Boards were too great, and a student "rebellion" against the military drill in 1874 suggested that it would take more than even a Civil War hero to save the College.

Rescue arrived in 1885 in the form of William DeWitt Hyde, a brisk young man who preached an idealistic philosophy, a sort of muscular Christianity, and a Teddy Roosevelt-like enthusiasm towards life. By the College's centennial in 1894, Hyde had rejuvenated the faculty, turned the "yard" into a quad (notably by the addition of McKim, Mead & White's Walker Art Building, perhaps the best piece of public architecture in Maine), and discovered how to persuade alumni to give money. Where Bowdoin had once prepared young men for the public forum, Hyde's college taught them what they needed to succeed in the new world of the business corporation. Much of this socialization took place in well-appointed fraternity houses; Bowdoin had had "secret societies" as far back as the 1840s, but it was not until the 1890s that they took over most of the responsibility for the residential life of the College. In the world of large research universities, Hyde — a prolific

writer in national journals — proved that there was still a place for the small, pastoral New England college.

Kenneth C. M. Sills, casting himself as the caretaker of Hyde's vision, shepherded the College through two World Wars and the Great Depression. Among his major accomplishments were removing the athletic program from the hands of alumni, gradually making Bowdoin more of a national institution, and cementing the fierce loyalty of a generation of graduates. His successor, James S. Coles, played the role of modernizer: new life was given the sciences, the faculty was more thoroughly professionalized, and the innovative "Senior Center" program was put in operation in the new high-rise dorm later named Coles Tower.

By the late 1960s, Bowdoin was a conservative, all-male, sports-minded college of about 950 students, but one in which an able youth could get a solid grounding in the liberal arts and sciences from an excellent faculty. The turmoil of the Vietnam era reached Brunswick with the student strike of 1970, however, and even the fraternity system began to be questioned. A still more radical change occurred in 1971 with the arrival of coeducation and an eventual increase in size to 1,400 students. As Maine began to be "rediscovered" in the 1970s, the College found its national profile rising, in part due to its decision not to require SAT scores for admission (on the grounds that the tests were not a reliable index of intellectual or creative ability). In the 1980s the College undertook to reform the curriculum, expand the arts programs, address environmental concerns, attract more minority students and faculty, and make the College coeducational in fact as well as in name.

By 1990, the College seemed, by national standards, a small and highly selective liberal arts college, whose chief drawing points were a strong teaching faculty willing to give close personal attention to undergraduates, a particularly vigorous program in the sciences, and an enviable location in coastal Maine. For so traditional-looking a place, the College continued to prove that it could innovate — for example, through pace-setting programs to use computers to teach classics and calculus, through access to live foreign television to teach languages, through student-constructed independent study projects and "years abroad," and, above all, through the microscale organic chemistry teaching technique.

It was still a college that took considerable pride in its roster of alumni and, now, alumnae. Among the twentieth-century names of note are those of Robert Peary (1877) and Donald MacMillan (1898), Arctic explorers; Paul H. Douglas (1913), economist and U.S. senator; Alfred C. Kinsey (1916), biologist; Hodding Carter, Jr. (1927), newspaper editor and writer; George J. Mitchell, Jr. (1954), and William S. Cohen (1962), U.S. senators; Thomas R. Pickering (1953), diplomat; and Joan Benoit Samuelson (1979), Olympic athlete.

PRESIDENTS OF BOWDOIN COLLEGE

Joseph McKeen	1802-1807
Jesse Appleton	1807-1819
William Allen	1820-1839
Leonard Woods, Jr.	1839-1866
Samuel Harris	1867-1871
Joshua L. Chamberlain	1871-1883
William DeWitt Hyde	1885-1917
Kenneth C. M. Sills	1918-1952
James S. Coles	1952-1967
Roger Howell, Jr.	1969-1978
Willard F. Enteman	1978-1980
A. LeRoy Greason	1981-1990
Robert H. Edwards	1990—

(Note: At various intervals, members of the faculty served as acting president of the College.)

Admission to the College

IN MAY 1989, THE GOVERNING BOARDS of Bowdoin College approved the following statement on admissions:

Bowdoin College is, first and foremost, an academic institution. Hence academic accomplishments and talents are given the greatest weight in the admissions process. While accomplishments beyond academic achievements are considered in admissions decisions, these are not emphasized to the exclusion of those applicants who will make a contribution to Bowdoin primarily in the academic life of the College. In particular, applicants with superior academic records or achievements are admitted regardless of their other accomplishments. All Bowdoin students must be genuinely committed to the pursuit of a liberal arts education, and therefore all successful applicants must demonstrate that they can and will engage the curriculum seriously and successfully.

At the same time that it is an academic institution, Bowdoin is also a residential community. To enhance the educational scope and stimulation of that community, special consideration in the admissions process is given to applicants who represent a culture, region, or background that will contribute to the diversity of the College. To ensure that the College community thrives, special consideration in the admissions process is also given to applicants who have demonstrated talents in leadership, in communication, in social service, and in other fields of endeavor that will contribute to campus life and to the common good thereafter. And to support the extracurricular activities that constitute an important component of the overall program at Bowdoin, and that enrich the life of the campus community, special consideration in the admissions process is also given to applicants with talents in the arts, in athletics, and in other areas in which the College has programs. The goal is a student body that shares the common characteristic of intellectual commitment but within which there is a considerable range of backgrounds, interests, and talents.

Although Bowdoin does not require that a student seeking admission take a prescribed number of courses, the typical entering first-year student will have had four years each of English, foreign language, mathematics, and social science, and three to four years of laboratory sciences. Further, most will offer studies in arts, music, or computer science.

Candidates applying to Bowdoin College are evaluated individually by members of the admissions staff in terms of six factors: academic record, the level of challenge in the candidate's course work, counselor/teacher recommendations and Bowdoin interview, application and essay, overall academic potential, and personal qualities.

APPLICATION AND ADMISSION PROCEDURES

Early Decision

Each year Bowdoin offers admission to approximately one-third of its entering class through two Early Decision programs. Those candidates who are certain that Bowdoin is their first choice and have a high school record that accurately reflects their potential should seriously consider this option, since it may resolve the uncertainty of college admission early in the senior year. The guidelines for Early Decision are as follows:

1. When candidates file a formal application for admission, they must state in writing that they wish to be considered for Early Decision and that they *will enroll if admitted*. Early Decision candidates are encouraged to file regular applications at other colleges, but only with the understanding that these will be withdrawn and no new applications will be initiated if they are accepted on an Early Decision basis by their first-choice college. In other words, only one Early Decision application may be made, but other regular applications may be initiated simultaneously.

2. The completed Personal Application Form and formal request for Early Decision addendum, a School Report Form, a secondary school transcript of grades, and the two Teacher Comment Forms must be submitted to Bowdoin by November 15 for notification by late December, or by January 15 for notification by late February.

3. Candidates admitted via Early Decision who have financial need as established by the guidelines of the College Scholarship Service and based on the Financial Aid Form will be notified of the amount of their award at the time they receive their Early Decision acceptance, provided their financial aid forms are on file at Bowdoin. It is Bowdoin's policy to fund all needy students who are admitted via Early Decision.

4. The submission of College Entrance Examination Board or American College Testing scores at Bowdoin is optional as an admissions requirement. Applicants need not be deterred from applying for Early Decision because they have not completed the CEEB or ACT tests. (However, CEEB or ACT scores are used for academic counseling and placement, and students are required to submit scores over the summer prior to enrolling.)

5. An Early Decision acceptance is contingent upon completion of the senior year in good standing.

6. Many candidates not accepted under the Early Decision program will be transferred to the regular applicant pool. Each year a number of applicants

who are deferred under Early Decision are accepted in mid-April, when decisions on all regular admissions are announced. However, some students may be denied admission at Early Decision time if the Admissions Committee concludes that their credentials are not strong enough to meet the overall competition for admissions.

7. Responsibility for understanding and complying with the ground rules of Early Decision rests with the candidate. Should an Early Decision candidate violate the provisions of the program, the College will reconsider its offer of admission (and financial aid, if appropriate) to the candidate.

Regular Admission

The following items constitute a completed admissions folder:

1. The student's application form submitted with the application fee (\$45) as early as possible in the senior year. The deadline for receiving regular applications is *January 15*. Bowdoin College also accepts the Common Application in lieu of its own form and gives equal consideration to both. Students may obtain copies of the Common Application from their high schools.

2. *School Report*: The college advisor's estimate of the candidate's character and accomplishments and a copy of the secondary school record should be returned to Bowdoin no later than January 15. A transcript of grades through the midyear marking period (Midyear School Report) should be returned to Bowdoin by February 15. If a student matriculates at Bowdoin College, the School Report and secondary school transcript will become part of the permanent college file and will be available for the student's inspection.

3. *Recommendations*: Each candidate is required to submit two Teacher Comment Forms, which should be given to two academic subject teachers for completion and returned as soon as possible and no later than January 15.

4. *College Entrance Examination Board or American College Testing Scores*: Bowdoin allows each applicant to decide if his or her standardized test results should be considered as part of the application. In past years approximately 30 percent of Bowdoin's applicants have decided not to submit standardized test results. In those cases where test results are submitted, the Admissions Committee considers this information as a supplement to other academic information such as the transcript and recommendations. The candidate is responsible for making arrangements to take the College Board examinations and for seeing that Bowdoin receives the scores if he or she wants them to be considered as part of his or her application. Should Bowdoin receive the scores on the secondary school transcript, these scores will be inked out before the folder is read by the Admissions Committee. Candidates may report their scores or instruct the College Board to send the scores to Bowdoin. Students choosing to submit their SAT and Achievement Test scores should complete the entire battery of examinations no later than January of the senior year.

N.B.—Because standardized test results are used for academic counseling and placement, all entering first-year students are required to submit scores over the summer prior to enrolling.

5. *Visit and Interview:* A personal interview at Bowdoin with a member of the admissions staff or senior interviewer is *strongly encouraged* but not required. Distance alone sometimes makes it impossible for candidates to visit the College. The Bowdoin Alumni Schools and Interviewing Committees (BASIC) are available in most parts of the country to assist those applicants. (For further information on BASIC, see page 209.) Candidates' chances for admission are not diminished because of the lack of an interview, but the interview impressions often prove helpful in reaching a decision. Ten carefully selected and trained Bowdoin senior interviewers conduct interviews to supplement regular staff appointments from September to January.

The Admissions Office is open for interviews throughout the year, except from January 15 to May 1, when the staff is involved in the final selection of the class.

6. *Notification:* All candidates will receive a final decision on their application for admission by early April. A commitment to enroll is not required of any candidate (except those applying for Early Decision) until the Candidates' Common Reply date of May 1. Upon accepting an offer of admission from Bowdoin, a student is expected to include a \$300 admissions deposit, which is credited to the first semester's bill.

7. Candidates requiring an application fee waiver may petition for one through their guidance counselor using the standard CEEB form.

Deferred Admission

Admitted students who wish to delay their matriculation to the College for one year in order to gain increased maturity or experience may request a deferment from the dean of admissions. It is Bowdoin's policy to honor these requests and to hold a place in the next entering class for these students. A \$300 **nonrefundable** admissions deposit must accompany the deferral request.

Admission with Advanced Standing

Bowdoin recognizes the College Entrance Examination Board and the International Baccalaureate programs and may grant advanced placement and credit toward graduation for superior performance in those programs. Applicants to Bowdoin are encouraged to take advantage of these programs and to have test results sent to the Admissions Office. Inquiries may be directed to the registrar.

Decisions on both placement and credit are made by the appropriate academic department in each subject area. Some departments offer placement examinations during the orientation period to assist them in making appropriate determinations. Every effort is made to place students in the most

advanced courses for which they are qualified, regardless of whether they have taken AP or IB examinations before matriculation.

Determinations of advanced placement and credit are made during the student's first year at Bowdoin. First-year students may apply a maximum of eight course credits toward the degree from the following sources: Advanced Placement Program, International Baccalaureate Program, and college credits from other institutions earned prior to matriculation.

International Students

In 1991–92, 410 international students applied for admission to Bowdoin. Of these, 47 were admitted and 11 chose to attend. Admissions policies and procedures for international students are the same as for regular first-year applicants, with the following exceptions:

1. Students whose first language is not English must submit official results of the Test of English as a Foreign Language by February 1.

2. All international students who submit the Foreign Student Financial Aid Form and the Bowdoin College Financial Aid Application will be considered for Bowdoin funds to defray part of their college costs, provided the student and his or her family can pay a portion of the college expenses. Bowdoin has designated two to three fully funded scholarships for international students for each entering class. These scholarships cover the full cost of attendance. The competition for these exceptional financial aid packages is intense.

3. The Admissions Committee attempts to build a highly diverse entering class and therefore welcomes the perspective that international students bring to the Bowdoin community.

Transfer Students

A limited number of students from other colleges and universities will be admitted each year to sophomore or junior standing at Bowdoin. The following information pertains to transfer candidates:

1. Candidates should file a transfer application by April 15 and include the \$45 application fee. Applicants must arrange to have submitted at the same time transcripts of their college and secondary school records, statements from deans or advisors at their colleges, and at least two recommendations from current or recent professors. Interviews are strongly recommended but not required. As soon as it becomes available, an updated transcript including spring semester grades should also be sent. Candidates whose applications are complete will normally be notified of Bowdoin's decision by late May. The deadline for midyear transfers is November 15; midyear candidates are notified by early January.

2. Transfer candidates should have academic records of Honors quality ("B" work or better) in a course of study that approximates the work that would have been done at Bowdoin, had they entered as first-year students.

Bowdoin accepts transfer credit for liberal arts courses in which a grade of C or higher has been received. Further, transfer students should understand that although they may expect an estimate regarding class standing upon transferring, official placement is possible only after updated transcripts have arrived at our Registrar's Office and have been appraised by the dean of the College and the appropriate departments.

3. Two years of residence are required for a bachelor's degree from Bowdoin. Students who have completed more than four semesters of college work are not eligible to transfer.

4. The financial aid funds available for transfer students are limited by commitments the College has already made to enrolled students and incoming first-year students. All transfers are eligible for aid, based on financial need. Applicants for aid must file a Financial Aid Form with the College Scholarship Service by April 1. Students who are admitted and funded will also be required to file the Bowdoin Financial Aid Application.

Special Students

Each semester, as space within the College and openings within courses permit, Bowdoin admits a few special students who are not degree candidates. In general, this program is intended to serve the special educational needs of residents in the Brunswick area. Those who already hold a bachelor's degree from a four-year college are normally ineligible for the program, although exceptions may be made for teachers wishing to upgrade their skills or for Bowdoin graduates who need particular courses to qualify for graduate programs. One or two courses are charged at a special rate of \$1,000 per course and no more than two courses may be taken each semester. No financial aid is available for special students. Interested applicants should submit the completed special student form and enclose the \$45 application fee at least one month prior to the beginning of the semester. Inquiries should be addressed to the transfer coordinator in the Admissions Office.

PROCEDURE FOR APPLICATION FOR FINANCIAL AID

Bowdoin is one of more than 1,000 colleges that ask candidates for financial aid to file information through the College Scholarship Service, CN6300, Princeton, NJ 08541. This organization was formed to simplify application procedures and to make decisions on awards as equitable as possible. Each applicant for financial aid must submit the Bowdoin Financial Aid Application (which is included with the Application for Admission) and must also obtain the Financial Aid Form (FAF) from his or her school and request the College Scholarship Service to forward a copy of this statement to Bowdoin. March 1 is the deadline for filing these applications (for Early Decision applicants, the Bowdoin Financial Aid Application should be filed by December 1).

Candidates should not be discouraged from applying to Bowdoin College for lack of funds. Because of its extensive scholarship grant and loan programs, Bowdoin's financial aid policy is designed to supplement family efforts so that as many students as possible can be admitted each year with the full amount of needed financial assistance. In 1991-92, approximately 40 percent of the entering class of 420 students received need-based grants. The amount of assistance intended to meet the individual's need is calculated from the information in the Financial Aid Form. The average award of grant and loan was about \$14,450. Additional material about the program of financial aid at Bowdoin may be found on pages 15-17. Awards of financial aid are announced with the letters of admission.

All correspondence concerning first-year and transfer admission to the College and scholarship aid should be addressed to the Dean of Admissions, Bowdoin College, Brunswick, ME 04011; tel. (207) 725-3100.

Financial Aid

BOWDOIN COLLEGE'S FINANCIAL AID POLICY is designed to supplement family resources so that as many students as possible can attend the College with the full amount of needed assistance. Scholarship grants, loans, and student employment are the principal sources of aid for Bowdoin students who need help in meeting the expenses of their education. Bowdoin believes that students who receive financial aid as an outright grant should also expect to earn a portion of their expenses and that they and their families should assume responsibility for repayment of some part of what has been advanced to help them complete their college course. Consequently, loans and student employment will generally be part of the financial aid award. All awards are made on the basis of satisfactory academic work and financial need, which is a requisite in every case. Applications for financial aid should be submitted to the director of student aid, who coordinates the financial aid program. Submission of the required application forms guarantees that the student will be considered for all the financial aid available to Bowdoin students, including grants, loans, and jobs from any source under Bowdoin's control.

Since its founding, Bowdoin College has been fortunate to have had many close friends, including alumni, faculty, and others, who have either bequeathed or made outright gifts in support of its endowment for scholarships and loan funds. Information on the availability of scholarship and loan funds may be obtained through the College's Student Aid Office. Questions regarding endowed funds and the establishment of such funds should be directed to the Office of Development.

In 1991-92, Bowdoin distributed a total of about \$7,250,000 in need-based financial aid. Grants totaled about \$6,000,000 in 1991-92 and were made to about 40 percent of the student body. Long-term loans continue to be an integral part of financial aid, supplementing scholarship grants. The College provides about \$800,000 to aid recipients each year from loan funds under its control; another \$525,000 in loan aid comes from private lenders under the terms of the Stafford program.

On the recommendation of the director of student aid, long-term loans may also be made to students not receiving scholarship grants. These loans, including Stafford Loans, Perkins Loans, and Bowdoin College Consolidated Loans, bear no interest during undergraduate residence. Interest is charged at 5% for the latter two loans; interest on Stafford Loans is set initially at 8%. Payment over a ten-year period begins six months after graduation, or separation, or after graduate school; two or three years of deferment are possible for various categories of service or internships. Perkins Loans also provide for the cancellation of some payments for persons who become teachers and/or who serve in the Peace Corps or Vista. Small, short-term loans are available upon application at the Business Office.

The student employment program offers a wide variety of opportunities to undergraduates. These include direct employment by the College, employment by the fraternities, and employment by outside agencies represented on the campus or located in the community. College policy is to give priority in hiring to students of recognized financial need. However, there is no limitation on students as to who may work on campus. Employment opportunities are open to all students who are interested, able, and willing to work. Commitments for employment are not made to first-year students until after the opening of College in the fall. The annual student payroll currently stands at about \$700,000.

The College participates in the Work-Study Program established under the Economic Opportunity Act of 1964, the Supplementary Educational Opportunity Grants Program established under the Higher Education Act of 1965, and the Pell Grant Program established under the Higher Education Amendments of 1972. The College also works closely with several states that can provide handicapped students and those receiving other forms of state aid with financial assistance to help with their educational expenses.

Application for Financial Aid

Students who wish to be considered for financial aid must submit an application each year. A Bowdoin Financial Aid Application is included with the application materials for admission to the College. March 1 is the deadline for filing these applications with the Office of Student Aid (for Early Decision applicants, the Bowdoin Financial Aid Application should be filed by December 1). In addition, all candidates for aid must submit the Financial Aid Form (FAF) of the College Scholarship Service by March 1.

Continuing students must also complete the Bowdoin Financial Aid Application and the Financial Aid Form of the College Scholarship Service between February and April. Forms and more detailed information are available from the Student Aid Office.

Transfer students applying for aid must file a Financial Aid Form with the College Scholarship Service by April 1. Students who are admitted and funded will also be required to file the Bowdoin Financial Aid Application.

Prematriculation Scholarships

About 160 first-year students each year receive prematriculation awards to help them meet the expenses of their first year. Recently the awards have ranged from \$500 to \$23,000. As noted above, some awards are direct grants, but most include the tender of loans. The size and nature of these awards depend upon the need demonstrated by the candidates. Applications should be made by March 1 of each year. Candidates will be notified of a prematriculation award at the time they are informed of the decision on their applications for admission, usually about April 5.

The general basis for determining the amount of all prematriculation scholarships is the individual's financial need. Need is determined by an

analysis of the statements of financial resources submitted to the Student Aid Office on the aid forms.

First-year students who hold prematriculation awards may be assured of continuing financial aid that meets their needs in subsequent years if their grades each semester are such as to assure progress required for continued enrollment (see "Deficiency in Scholarship," page 29). In the sophomore, junior, and senior years, the proportion of financial aid offered as a grant will be progressively decreased, and that offered as a loan increased, except in the case of certain scholarships where the award must be made as a grant.

All awards of financial aid made in anticipation of an academic year, including the first year, will remain in effect for the full year unless the work of the holder is unsatisfactory. Awards for such students may be reduced or withdrawn for one semester. Awards may also be reduced or withdrawn for gross breach of conduct or discipline.

General Scholarships

Awards similar to prematriculation scholarships are granted to undergraduates already enrolled in college on the basis of their academic records and their financial need. Normally, these awards are made at the end of one academic year in anticipation of the next, but applications may be made in November for aid to be assigned during the spring semester on a funds-available basis. Awards made for a full year are subject to the same provisions covering prematriculation awards, but those made for a single semester are not considered as setting award levels for the following year.

Graduate Scholarships

Bowdoin is able to offer a number of scholarships for postgraduate study at other institutions. Grants of various amounts are available to Bowdoin graduates who continue their studies in the liberal arts and sciences and in certain professional schools. Awards up to full tuition are possible for those attending Harvard University's medical, law, or business schools. In 1991-92, Bowdoin provided \$344,400 in graduate scholarship assistance to 107 students. Further information about these scholarships is available through the Student Aid Office.

Special Funds

Income from these funds is used to assist students with special or unexpected needs. Further information is available through the Office of the Dean of the College.

Expenses

COLLEGE CHARGES

College Charges 1992-93

The charges for tuition, room rent, board, and fees for the year are listed below. These do not include costs for travel, books, or personal expenses; students must budget for such items on their own.

	By Semester		Total
	Fall	Spring	For the Year
Tuition	\$8,517.50	\$8,517.50	\$17,035.00
Board	1,625.00	1,625.00	3,250.00
Room Rent			
Residence Halls	1,302.50	1,302.50	2,605.00
Pine and Harpswell			
Street Apartments	1,770.00*	1,770.00*	3,540.00*
Other Apartments	1,477.50*	1,477.50*	2,955.00*
Student Activities Fee	80.00	80.00	160.00
Health Services Fee	80.00**	80.00**	160.00**
Continuation Deposit			300.00+

* When normal occupancy is varied, rates may change accordingly.

** The Health Services Fee is mandatory for all enrolled students.

+ The continuation deposit is required of all students who plan to continue at Bowdoin. Due March 15, it is applied to the fall semester bill. Failure to register or to occupy College housing will result in forfeiture of this deposit unless appropriate permission has been obtained from the Deans' Office.

For planning purposes, students and parents should anticipate that tuition and other charges may increase each year to reflect program changes and other cost increases experienced by the College.

Registration and Enrollment

All students are required to register at the opening of each semester in accordance with schedules posted at the College and mailed to students registering for the first time. A fee of \$20 is assessed for late registration.

Refunds

Refunds of tuition and fees for students leaving the College during the course of a semester will be made in accordance with the following refund schedule:

During the first two weeks.	80%
During the third week	60%
During the fourth week	40%

During the fifth week	20%
Over five weeks	No refund

Refunds for board and room will be prorated on a daily basis in accordance with the student's attendance as it relates to the College's calendar, after adjustments for fixed commitments and applicable overhead expense. *Students who are dismissed from the College within the first five weeks for other than academic or medical reasons are not entitled to refunds.* Financial aid awards will be credited in proportion to educational expenses as stipulated in a student's award letter, but in no case will they exceed total charges to be collected. Application for a refund must be made in writing to the cashier of the College within 30 days of the student's leaving.

Tuition

Any student completing the number of courses required for the degree in fewer than eight semesters must pay tuition for eight semesters, although the dean of the College is authorized to waive this requirement if courses were taken away from Bowdoin. The accumulation of extra credits earned by taking more than four courses during a semester shall not relieve the student of the obligation to pay tuition for eight full semesters at Bowdoin College.

There are opportunities at Bowdoin to receive financial aid in meeting the charge for tuition. Detailed information about scholarships, loans, and other financial aid may be found on pages 15–17.

Room and Board

Entering first-year students are guaranteed housing and are required to live on campus. They may indicate their residence needs on a preference card issued by the Dean of Students' Office during the summer preceding their arrival at Bowdoin. The associate dean of students coordinates housing accommodations for the remaining classes through a lottery system, the most equitable approach given the College's limited space for housing.

Residence hall suites consist of a study and bedroom, provided with essential furniture. Students should furnish blankets and pillows; linen and laundry services are available at moderate cost. College property is not to be removed from the building or from the room in which it belongs; occupants are held responsible for any damage to their rooms or furnishings.

Board charges are the same regardless of whether a student eats at the Moulton Union, Coles Tower, or a fraternity. Students who live in Bowdoin facilities, except apartments, are required to take a 19-meal or 14-meal board plan. Partial board packages are available to students living off campus or in College-owned apartments.

Other College Charges

All damage to the buildings or other property of the College by persons unknown may be assessed equally on all residents of the building in which the

damage occurred. The Student Activities Fee is set by the student government, and its expenditure is allocated by the Student Activities Fee Committee.

Health Care

The facilities of the Dudley Coe Health Center and the Counseling Service are available to all students. Part of the Health Services Fee covers health and accident insurance, in which all students are enrolled. Insurance offers year-round coverage and can be extended to cover leaves of absence or study away.

Bills are rendered by the College for many medical services provided through the health center. Most of these costs are covered by student health insurance. A pamphlet specifying the coverage provided by student health insurance is available from the cashier and will be included with the first tuition bill each year. Any costs not covered by insurance will be charged to the student's account.

Motor Vehicles

All motor vehicles, including motorcycles and motor scooters, used on campus or owned and/or operated by residents of any College-owned residence or recognized fraternity must be registered with Campus Security. The registration fee is \$10 a year for students living in College housing. For students living off campus in apartments and fraternities, registration is free. Failure to register a motor vehicle will result in a \$25 parking ticket each time the vehicle is found on campus. Students wishing to register a vehicle for a period of time less than one semester must make special arrangements with Campus Security. All students maintaining motor vehicles at the College are required to carry adequate liability insurance. Parking on campus is limited and students will be assigned parking areas according to their living locations.

PAYMENT OF COLLEGE BILLS

Bills for the tuition, board, room rent, and fees for the fall and spring semesters will be sent on or about July 15 and December 15, respectively. Credits (funds actually received) and tentative credits (loans, payment plan funds, and scholarships not yet received but expected to arrive) will also appear on the bill. Bowdoin scholarship grants, payments from the family, or any other cash payments are examples of credits. Non-Bowdoin scholarship aid that has been reported, payments arranged for with an installment payment plan company, and Bowdoin loan offers are examples of tentative credits. The balance due is the difference between all charges and all credits and tentative credits.

Students and their parents or guardians may pay the College charges as they fall due each semester, or by using one of the installment payment plans offered by Academic Management Services, the Knight Agency, Tuition

Management Systems, or the Tuition Plan, Inc. They may also arrange to pay the total due by using a mixture of these two payment options.

The payment dates in the payment plans may not be deferred for the convenience of families using Stafford and parent loans, or other tuition payment programs. Both long- and short-term financial arrangements should be made far enough in advance to assure payment on the required dates. *Students with unpaid bills may not register for or attend classes, nor are they eligible for academic credit, semester grade reports, transcripts, or degrees.*

Late Payment Charge

The balance due each semester will be considered overdue if not paid within 15 days of the billing date, and any unpaid balance will be subject to a late charge of 12.5% per annum. Any balance that will not be covered by a student loan in process, a payment plan contract, or an anticipated reported scholarship is subject to late charges.

The Curriculum

BOWDOIN DOES NOT PRESCRIBE specific liberal arts courses for all students. Instead, each student determines, with the help and approval of an academic advisor, an appropriate pattern of courses. To ensure that students explore the breadth of the curriculum before settling upon a major, they are expected to complete two courses each in natural science and mathematics, social and behavioral sciences, and humanities and fine arts; two courses must also be designated as non-Eurocentric studies. Courses, it is assumed, do not lead simply to other courses in the same subject. Properly taught, they should raise questions and evoke a curiosity that other disciplines must satisfy. The College also recognizes through its course offerings the importance of relating a liberal education to a society whose problems and needs are continually changing.

The breadth of a liberal arts education is supposed to distinguish it from professional training, and its depth in one field, from dilettantism, although in fact it shares qualities of both. Bowdoin encourages students to extend their concerns and awareness beyond the personal. At the same time, the College helps students to integrate curricular choices in accordance with individual intellectual needs. Interaction between the students and their academic advisors is a vital part of this educational experience.

Each student is assigned an academic advisor at the start of the first year. Students generally maintain this relationship for the first two years. Whenever possible, the dean of students assigns advisors on the basis of students' intellectual interests. Advisors and students meet regularly during orientation prior to fall semester classes and on an individual basis thereafter. During the first week of classes, the student selects courses and receives approval from the advisor through a signature on the registration card.

Students elect a major during the second semester of the sophomore year. After registering for a major, a student is advised by a member of his or her major department.

REQUIREMENTS FOR THE DEGREE

To qualify for the bachelor of arts degree, a student must have

1. successfully passed 32 courses;
2. spent four semesters (passing at least 16 courses) in residence, at least two of which will have been during the junior and senior years;
3. completed at least two semester courses in each of the following divisions of the curriculum: natural science and mathematics, social and behavioral sciences, humanities and fine arts; and two semester courses in non-Eurocentric studies; and

4. completed a departmental major or majors, an interdisciplinary major, or a student-designed major (a departmental minor may be completed with any of the preceding).

DISTRIBUTION REQUIREMENTS

Distribution requirements should normally be completed by the end of the sophomore year. Students must take two courses from each of the three divisions of the curriculum, with two courses in non-Eurocentric studies. A course that satisfies the non-Eurocentric studies requirement may also count for its division. Because these requirements are intended to apply to the college liberal arts experience, they may not be met by Advanced Placement or International Baccalaureate credits, but may be met, under the supervision of the Recording Committee, by credits earned while studying away from Bowdoin. Areas of distribution are defined as follows:

Natural Science and Mathematics: Biochemistry, biology, chemistry, computer science, geology, mathematics, neuroscience, physics, and certain environmental studies courses. (Designated by the letter *a* following a course number in the course descriptions.)

Social and Behavioral Sciences: Afro-American studies, economics, government, psychology, sociology and anthropology, and certain Asian studies, environmental studies, history, and women's studies courses. (Designated by the letter *b* following a course number in the course descriptions.)

Humanities and Fine Arts: Art, classics, education, English, dance, German, music, philosophy, religion, Romance languages, Russian, most history courses, and certain Asian studies and women's studies courses. (Designated by the letter *c* following a course number in the course descriptions.)

Non-Eurocentric Studies: Students must take two courses that focus on a non-Eurocentric culture or society, exclusive of Europe and European Russia and their literary, artistic, musical, religious, and political traditions. The requirement is intended to introduce students to cultures fundamentally different from their own and to open their minds to different ways in which other people perceive and try to cope with the challenges of life. Though courses treating North American and European topics will not normally count toward this requirement, courses on African-American or Native American cultures will meet the requirement when the emphasis is clearly on those cultures and their differences from the predominant culture of the United States. *Language courses do not meet this requirement.* (Designated by the letter *d* following a course number in the course descriptions.)

THE MAJOR PROGRAM

Students may choose one of six basic patterns to satisfy the major requirement at Bowdoin: a departmental major, two departmental majors, an interdisci-

plinary major, a coordinate major, a student-designed major, or any of the preceding with a departmental minor. Majors are offered in the following areas:

Afro-American Studies	Government and Legal Studies
Anthropology	History
Art History	Mathematics
Asian Studies	Music
Biochemistry	Neuroscience
Biology	Philosophy
Chemistry	Physics and Astronomy
Classics and Classics/Archaeology	Psychology
Computer Science	Religion
Economics	Romance Languages
English	Russian
Environmental Studies	Sociology
Geology	Studio Art
German	

Each student must choose a major by the end of the sophomore year after consultation with the department or departments involved. No student will be accepted as a major in any department until that student has passed the courses required for admission to that major. Students may add or change majors and/or minors until the end of the first semester of their senior year. Changes by seniors in interdisciplinary or self-designed majors require the approval of the Recording Committee. A student who has not been accepted in a major department may not continue registration.

Departmental Major

All departments authorized by the faculty to offer majors specify the requirements for the major in the catalogue. A student may choose to satisfy the requirements of one department (single major) or to satisfy all of the requirements set by two departments (double major). A student may drop a second departmental major by notifying both the registrar and the department concerned at any time.

Interdisciplinary Major

As the intellectual interests of students and faculty alike have reached across departmental lines, there has been a growing tendency to develop interdisciplinary majors. Interdisciplinary majors are designed to tie together the offerings and major requirements of two separate departments by focusing on a theme that integrates the interests of those two departments. Such majors usually fulfill most or all of the requirements of two separate departments and usually entail a special project to achieve a synthesis of the disciplines involved.

Anticipating that many students will be interested in certain patterns of interdisciplinary studies, several departments have specified standard require-

ments for interdisciplinary majors. For descriptions of these interdisciplinary majors, see pages 123–25.

A student may take the initiative to develop an interdisciplinary major by consulting with the chairs of the two major departments. A student may not select an interdisciplinary major after the end of the junior year.

Student-Designed Major

In some cases, a student may wish to pursue a major program that does not fit either of the patterns described above. The faculty has authorized a pattern that permits a student working together with two faculty members to develop a major program that may draw on the offerings of more than two departments. Guidelines for the development of student-designed majors are available from the Registrar's Office; student-designed majors require the approval of the Recording Committee. Students should apply for a student-designed major before the end of the sophomore year.

Coordinate Major

The coordinate major is currently offered only in relation to the Afro-American Studies Program and the Environmental Studies Program. For a specific description of these majors, see pages 36–39 and 89–93.

The Minor

All departments and some programs offer a minor program consisting of no fewer than four courses and no more than seven courses, including all prerequisites. A minor program must be planned with and approved by the student's major department, and approved by the student's minor department. A minor may be dropped at any time by notifying both the registrar and the department or program concerned, but may not be added after the end of the first semester of the senior year.

Independent Study

With departmental approval, a student may elect a course of independent study under tutorial supervision. A department will ordinarily approve one or two semesters of independent study for which regular course credit will be given. A definite plan for the project approved by the department and the tutorial advisor must be presented to the registrar by the end of the first week of classes. Where more than one semester's credit is sought for a project, the project will be subject to review by the department at the end of the first semester. In special cases the Recording Committee, upon recommendation of the department, may extend credit for additional semester courses beyond two. In independent study courses that will continue beyond one semester, instructors have the option of submitting at the end of each semester, except the last, a grade of S in place of a regular grade. A regular grade will be submitted at the end of the final semester of independent study and will become the grade for the previous semesters of independent work.

There are normally two kinds of independent study and each should be registered for under the appropriate course number. A directed reading course designed to allow a student to explore a subject not currently offered within the curriculum shall be numbered **291, 292, 293, or 294**. An independent study that will culminate in a substantial and original research, fine arts, music, or creative writing project or that is part of a departmental honors program shall be numbered **401** or higher. In most departments, the project will consist of a written dissertation or an appropriate account of an original investigation, but projects in music, the fine arts, and letters are also encouraged. Independent study may not be taken on a Credit/Fail basis.

ACADEMIC REGULATIONS

Course Load

Students are required to take the equivalent of four full courses each semester. Students wishing to take more than *five* courses must have the permission of the dean of students. A student may not take five courses in the semester following the receipt of an F without the dean's approval. Juniors or seniors who have accumulated extra credits may apply to the dean for permission to carry a three-course load once during their last four semesters at Bowdoin. No extra tuition charge is levied upon students who register for more than four courses, and, by the same token, no reduction in tuition is granted to students who choose to register for three courses.

Course Examinations

The regular examinations of the College are held at the close of each semester. An absence from an examination may result in a grade of F. In the event of illness or other unavoidable cause of absence from examination, the dean of students may authorize makeup of the examination.

Course Grades

Course grades are defined as follows: A, excellent; B, good; C, fair; D, poor; F, failing. A grade of D indicates work that in at least some respects falls below the acceptable standard for academic work at Bowdoin; only a limited number of D grades may be counted toward the requirements for graduation (see "Deficiency in Scholarship," below).

Most departments will not accept as prerequisites or as satisfying the requirements of the major, courses for which a grade of D has been given. Questions should be referred directly to the department chair. Students who receive a grade of D or F in a course may retake the course. Both courses and both grades will appear on the transcript, but only one course credit will be given for successful completion of a given course.

In independent study courses that will continue beyond one semester, instructors have the option of submitting at the end of each semester, except the last, a grade of S (for Satisfactory) in place of a regular grade. A regular

grade shall be submitted at the end of the final semester and shall become the grade for the previous semesters of independent study. Prior to September 1991, Bowdoin used a four-point grading system of High Honors, Honors, Pass, and Fail.

Incompletes

With the approval of the dean and the instructor, a grade of Incomplete may be recorded in any course for extenuating circumstances such as family emergency, illness, etc. At the time an Incomplete is agreed upon by the dean, the student, and the instructor, a date shall be set by which all unfinished work must be submitted by the student to the instructor. Ordinarily, this will be no later than the end of the second week of classes of the following semester. The instructor should submit a final grade within two weeks of this date. If the course work is not completed within the specified time limit, the registrar will change the Incomplete to Fail. Any exceptions to this rule or a change of the specified time limit may require approval of the Recording Committee.

Credit/Fail Option

A student may elect to enroll in a limited number of courses on a Credit/Fail basis. Graduation credit is given for courses in which a grade of Credit is received. A student may elect no more than one course of the normal four-course load each semester on a Credit/Fail basis, although a student may elect a fifth course any semester on a Credit/Fail basis. No more than four of the thirty-two courses required for graduation may be taken on a Credit/Fail basis; courses in excess of the thirty-two required may be taken for Credit/Fail without limit as to number. No course may be changed from graded to Credit/Fail or vice versa after the first week of classes. Most departments require that all courses taken to satisfy requirements of the major be graded.

Grade Reports

A report of the grades of each student is sent to the student at the close of each semester.

The Dean's List

Students who in a given semester receive grades of A or B in at least the equivalent of four full-credit courses (no grade lower than a B) are placed on the Dean's List for that semester. A grade of Credit or Satisfactory may not be substituted for one of the required letter grades. A student whose Satisfactory grade is later converted to an A or a B, and who thereby becomes eligible for the Dean's List, will be placed on the Dean's List retroactively.

Maximum Residency

No student will ordinarily be permitted to remain at Bowdoin for more than nine semesters of full-time work.

Senior Course Selection

A student may be required to take a course in his or her major department in each semester of the senior year at the department's discretion.

Leave of Absence

A student in good standing may, with the approval of his or her advisor, apply to the Recording Committee for a leave of absence for nonacademic pursuits for one or two semesters. The leave must begin at the end of a regular semester. A student on approved leave is eligible for financial aid upon his or her return. A student wishing to apply for a leave of absence for one or both semesters of an academic year must submit an application by March 1 of the previous academic year. Applications for leave of absence submitted during the fall semester requesting a leave for the next spring semester will be considered only in the most urgent circumstances. Academic credit may not be transferred to Bowdoin for courses taken while on leave.

THE AWARD OF HONORS

Departmental Honors

The degree with honors, high honors, or highest honors in a major subject is awarded to students who have distinguished themselves in that subject. The award is made by the faculty upon recommendation of the department.

All written work in independent study accepted as fulfilling honors requirements shall be deposited in the library in a form specified by the Library Committee.

General Honors

General Honors are awarded on the basis of all grades in a student's final six semesters at Bowdoin, except that a student who receives a grade of D or F in any course at Bowdoin or in any course at an institution from which academic credit is being transferred to Bowdoin is normally not eligible for General Honors. Students who have studied at Bowdoin for fewer than six semesters are normally not eligible. The Recording Committee considers petitions for exceptions to the normal criteria.

A degree *cum laude* shall be awarded to a student who receives at least 75 percent grades of B/Honors or A/High Honors. Within these grades, there must be two grades of A/High Honors for each grade of C/Pass.

To receive a degree *magna cum laude*, a student shall fulfill the requirement for a degree *cum laude*, with the additional stipulation that at least 30 percent of the grades must be A/High Honors in addition to the grades of A/High Honors balancing the grades of C/Pass.

The degree *summa cum laude* shall be awarded to a student who receives at least 70 percent grades of A/High Honors and the balance B/Honors.

DEFICIENCY IN SCHOLARSHIP

Students are expected to make “normal progress” toward the degree. Normal progress is defined as passing the equivalent of four full-credit courses each semester. Students may not matriculate in a fall semester if they are more than two course credits short of normal progress. Students who fail to meet this matriculation standard are expected to make up deficient credits in approved courses at another accredited institution of higher education.

The Recording Committee is responsible for ensuring that students’ academic records meet acceptable standards. To monitor substandard academic performance, Bowdoin uses a system of academic probations.

Academic Probation

Students will be placed on academic probation for one semester if they

1. receive two Fs, one F and two Ds, or four Ds in their first semester as first-year students at Bowdoin;
2. receive one F or two Ds in any one subsequent semester;
3. receive a cumulative total of four Ds or two Fs during their tenure at Bowdoin.*

Students will remain on academic probation if they receive one D while on academic probation. Students who are on academic probation will be assigned a special probationary advisor through the Deans’ Office. Students who are on academic probation are not eligible to study away.

Academic Suspension

Students will be subject to academic suspension if they

1. receive four Fs in their first semester as first-year students at Bowdoin;
2. receive two Fs, one F and two Ds, or four Ds in any subsequent semester;
3. receive one F or two Ds while on academic probation;
4. receive a cumulative total of three Fs, two Fs and two Ds, one F and four Ds, or six Ds during their tenure at Bowdoin.*

Students who are suspended for academic deficiency are normally suspended for at least one academic year. Suspended students must apply for readmission and must present grades of C or better in approved courses from another accredited four-year institution to make up their credit deficiency before they will be approved for readmission. Students who are readmitted are eligible for financial aid, according to demonstrated need.

*In the computation of cumulative grades for probation, suspension, or dismissal, grades earned in the first semester of the first year are given half weight.

Permanent Dismissal

Students will be subject to permanent dismissal if they

1. incur a second academic suspension; or
2. receive a fifth F or a ninth D, or some equivalent combination of Fs and Ds where one F is equivalent to two Ds,* during their tenure at Bowdoin.

SPECIAL PROGRAMS

Architectural Studies

Although the College offers no special curriculum leading to graduate study in architecture, students interested in a career in this field should consult with members of the Studio Art Division of the Department of Art as early as possible. In general, students should develop the ability to conceive and articulate architectural and spatial concepts in two and three dimensions and to render visual ideas through drawing and model making.

Arctic Studies

A concentration in arctic studies, offered through the Department of Sociology and Anthropology, the Department of Geology, and the Peary-MacMillan Arctic Museum and Arctic Studies Center, provides students with opportunities to explore cultural, economic, and environmental issues involving arctic lands and peoples. Students interested in the Arctic are encouraged to consult with the director of the Arctic Studies Center in order to plan an appropriate interdisciplinary program, involving course work and fieldwork at Bowdoin and in the North.

Engineering Programs

Through an arrangement with the School of Engineering and Applied Science of Columbia University and with the California Institute of Technology, qualified students may transfer into the third year of an engineering option after completing three years at Bowdoin. After the completion of two full years at the engineering school, a bachelor of arts degree is awarded by Bowdoin and a bachelor of science degree by the engineering school. Students should be aware that admission to these schools is not automatic and does not assure financial aid.

Students interested in these programs should start planning early and should consult regularly with James H. Turner of the Department of Physics. All students must take **Physics 103, 223, 227, 228**; either the **Chemistry 101, 102** sequence or **Chemistry 109**; **Mathematics 161, 171, 181**; and **Computer Science 101**. They are also expected to have at least ten semester courses outside of mathematics and science. Economics is strongly suggested.

First-Year Seminars

Please see First-Year Seminars on pages 94–98.

Health Professions

Members of the Health Professions Advisory Committee chaired by the advisor for the health professions, C. Thomas Settemire, Departments of Biology and Chemistry, are available to discuss career interests and undergraduate course programs. The Office of Career Services maintains a collection of reference materials regarding careers in the various health professions, as well as information about summer internship programs. In addition, Sue Livesay, associate director, is available to discuss career planning in the medical sciences.

A meeting of students interested in the health professions is held at the opening of College each fall. Other meetings intended to be of help and interest to students preparing for health professions are announced during the year.

Legal Studies

Students considering the study of law should consult with the Legal Studies Advisory Group and the Office of Career Services. Members of the Legal Studies Advisory Group include Craig A. McEwen, Department of Sociology and Anthropology; Richard E. Morgan and Allen L. Springer, Department of Government and Legal Studies; Lisa Tessler, Office of Career Services; and George S. Isaacson, Esq. They can advise students on the best ways to design a coherent liberal arts program that relates to the study of law and allied fields.

Bowdoin participates with Columbia University in an accelerated interdisciplinary program in legal education. Under the terms of this program, Bowdoin students may apply to begin the study of law after three years at Bowdoin. Students who successfully complete the requirements for the J.D. at Columbia also receive an A.B. from Bowdoin.

Teaching

Students with an interest in teaching in schools or enrollment in graduate programs in education should discuss their plans with personnel in the Department of Education as soon as possible. Because courses in education and psychology, along with a major in a teaching field, are necessary for certification, it is wise to begin planning early so that schedules can be accommodated. An extensive resource library in the Department of Education office contains information about graduate programs, summer and academic year internships, volunteer opportunities with youth and in the schools, and public and private school openings. Career advising and placement services are also available.

OFF-CAMPUS STUDY

Bowdoin offers its students the opportunity to participate in a variety of programs sponsored by other institutions and organizations. Study away must be approved by the College's Committee for Off-Campus Study and

the student's major department; requests must be submitted to the registrar prior to March 1 of the academic year preceding attendance. Many specific programs and requirements for participation in them have been approved (see page 33 for information on Twelve-College Exchange).

Foreign Study

Students may apply for study in virtually any country. The Deans' Office has a list of programs that have been approved. With faculty endorsement, other arrangements are possible. Information, including student evaluations, is also available from the Deans' Office. Deadlines for application to foreign programs vary; a student should consult with the committee early in the academic year preceding anticipated participation.

Domestic Study

Study at other institutions in the United States should be considered primarily as an extension of Bowdoin's academic program. Therefore, a student's academic motivation is the essential criterion for approval. Bowdoin has a number of defined exchange programs; to attend any institution not currently approved, a student must, after consultation with his or her advisor, present evidence that the study requested will be undertaken in at least a comparable academic environment. It is the student's responsibility to apply to Bowdoin and to the other institution for acceptance.

Approved programs include the City Semester at Boston University, Williams College/Mystic Seaport Program, the National Theater Institute, Washington Semester programs of American University and Boston University, SEA Semester at Woods Hole Oceanographic Institution, and the Twelve-College Exchange (see page 33). Forms for and information about these programs are available in the Deans' Office.

In all off-campus study programs, credit will be transferred only for grades of C-minus or better, and an official transcript must be submitted to Bowdoin's registrar.

Intercollegiate Center for Classical Studies in Rome

The Intercollegiate Center for Classical Studies in Rome, established in 1965, provides undergraduates with an opportunity to study Roman art, archaeology, and history, as well as Greek and Roman literature, Italian language, and Renaissance and baroque Italian art. Under the auspices of a consorial arrangement directed by Stanford University Overseas Studies, ICCS operates two semesters each academic year; students drawn from approximately 40 participating institutions generally enroll for one semester during their junior year. Further information about the program may be obtained from Barbara Weiden Boyd in the Department of Classics.

Intercollegiate Sri Lanka Education (ISLE) Program

The ISLE Program is a Bowdoin-administered annual study program in

Kandy, Sri Lanka. Established in 1981, and affiliated with the University of Peradeniya, ISLE provides authentic intellectual and cultural experiences for up to twenty students with academic interests in South Asia. Course offerings include required language study, ancient and modern history, Buddhist philosophy and practice, social and gender issues, literature and folklore, politics and government, economics, dance, and independent study. Students live with Sri Lankan host families and tour important archaeological and religious sites during the program, and are encouraged to visit India or other Asian countries after it concludes. Bowdoin grants five course credits for the fall semester, and up to three additional credits for individually tailored courses in the optional spring semester. Interested students should consult the ISLE faculty advisor, John C. Holt of the Department of Religion and the Asian Studies Program.

South India Term Abroad (SITA) Program

The SITA Program, administered by Bowdoin, operates annually in Tamil Nadu, India. Designed primarily for non-South Asia specialists, SITA offers a standardized curriculum in the fall semester, with courses in language, history, religion, social and cultural issues, and independent study, for which Bowdoin grants five course credits. An extension of one to three months, for up to three credits in individually tailored courses, is available for exceptional students. Participants live with host families and tour several regions in South India during the program, and may travel in other parts of South Asia after its conclusion. Bowdoin's SITA faculty advisor is Sara A. Dickey, Department of Sociology and Anthropology and the Asian Studies Program.

The Swedish Program in Organizational Studies and Public Policy

The Swedish Program is sponsored by the University of Stockholm and a consortium of American colleges and universities, including Bowdoin. It offers students the opportunity to spend either a semester or a year studying comparative institutional organization and public policy in complex industrial societies. Most courses are interdisciplinary in nature. Required courses include Swedish language and *The Swedish Model: An Interdisciplinary Approach*. A sampling of elective courses for 1992–93 includes *Women and Equality*, *Scandinavia in World Affairs*, and *The Environment and Health Care*. The two-week orientation and some courses involve extensive study trips, and there are week-long study visits to Berlin and Budapest. Students may reside with Swedish families in and near Stockholm or in campus dormitories. The Bowdoin faculty advisor is David J. Vail, Department of Economics.

Twelve-College Exchange

Bowdoin has joined with Amherst, Connecticut, Dartmouth, Mount Holyoke, Smith, Trinity, Vassar, Wellesley, Wesleyan, Wheaton, and Williams to form

the Twelve-College Exchange program. Students from one college may apply to study for a year at one of the other colleges.

Bowdoin students wishing to participate in the exchange program should make application to the Office of the Dean of the College by February 1 of the academic year prior to their intended participation in the program. Detailed information on the course offerings of the participating colleges is available from the dean's office. Application is normally made for two semesters. The exchange affords students the opportunity to take courses that are not offered at Bowdoin or to study specialized aspects of their major fields of concentration with faculty members who have achieved preeminence in those specialties. Course work satisfactorily completed at any of the participating colleges will receive credit toward a degree at Bowdoin.

Courses of Instruction

EXPLANATION OF SYMBOLS USED

The departments of instruction in the following descriptions of courses are listed in alphabetical order. A schedule containing the time and place of meeting of all courses will be issued before each period of registration.

[Bracketed Courses]: All courses that are not currently scheduled for a definite semester are enclosed in brackets.

* An asterisk following a professor's name indicates that he or she is on leave for the fall semester.

** Two asterisks following a professor's name indicate that he or she is on leave for the spring semester.

† A dagger following a professor's name indicates that he or she is on leave for the entire academic year.

a: A course whose identifying number is followed by this letter satisfies one semester of the distribution requirement for natural science and mathematics.

b: A course whose identifying number is followed by this letter satisfies one semester of the distribution requirement for social and behavioral sciences.

c: A course whose identifying number is followed by this letter satisfies one semester of the distribution requirement for humanities and fine arts.

d: A course whose identifying number is followed by this letter satisfies one semester of the distribution requirement for non-Eurocentric studies.

Independent Study: See page 25 for a description.

Prerequisites: Unless otherwise stated in the description, a course is open to all students.

Course Numbering. Courses are numbered according to the following system:

10–29	First-year seminars.
30–99	Courses intended for the nonmajor.
100–199	General introductory courses.
200–289	General intermediate-level courses.
290–299	Independent study: Directed reading.
300–399	Advanced courses, including senior seminars and topics courses.
400	Independent study: Original or creative projects and honors courses.

Afro-American Studies

Administered by the Committee on Afro-American Studies

Professors

Daniel Levine

Craig A. McEwen

Allen Wells

Associate Professor

Randolph Stakeman, *Director*

Assistant Professors

Thomas C. Killion

Rajani Sudan

Afro-American studies is an interdisciplinary program, designed to bring the scholarly approaches and perspectives of several traditional disciplines to bear on an understanding of black life. Emphasis is placed on the examination of the rich and varied cultures, literature, and history of black people in Africa and in the African diaspora, including the United States, the Caribbean, and Latin America. Such a systematic interdisciplinary approach captures the historic, multifaceted quality of African-American scholarship and allows the student to integrate effectively the perspectives of several academic departments at the College.

Requirements for the Major in Afro-American Studies

The major in Afro-American studies consists of five required core courses, a concentration of four additional courses, and a one-semester research project, for a total of ten courses. The core courses—**Afro-American Studies 101 or 102; Sociology 208; English 275 or 276**; one of the following: **History 241, 245, or 256**; and one of the following: **History 261, 262, or 267**—have been chosen to give the student a thorough background for the study of the black experience and to provide an introduction to the varied disciplines of Afro-American studies.

The five-course concentration is intended to bring the methodologies and insights of several disciplines to a single problem or theme. Suggested concentrations are Race and Class in American Society, Cultures of the African Diaspora, Political Economy of Blacks in the Third World, the Arts of Black America, and the coordinate major. Appropriate courses to be taken should be worked out by the student and the director of the Afro-American Studies Program.

Alternatively, the student and the director may devise a concentration around another specific theme and submit a proposal to the Committee on Afro-American Studies for its approval. In addition, the research project, normally completed in the senior year, allows students to conduct research into a particular aspect of the black experience. Students may complete their research project as part of a 300-level course cross-listed in the program, or as an independent study under the direction of one of the program's faculty. Students should consult with the director concerning courses offered in previous years that may satisfy the program requirements.

Coordinate Major in Afro-American Studies

The purpose of the coordinate major is to encourage specialization in Afro-American studies within the framework of a recognized academic discipline. This major is, by nature, interdisciplinary, and strongly encourages independent study. The coordinate major entails completion of an ordinary departmental major in sociology, anthropology, or history. The student is expected to take those courses within the major department that are cross-listed in the Afro-American Studies Program insofar as departmental major requirements permit. In addition, the student must take **Afro-American Studies 101** and four other courses outside the major department approved by the director of Afro-American studies. Students electing the coordinate major are required to carry out scholarly investigation of a topic relating to the African-American experience; not more than one of the elective courses may normally be an independent study course (**Afro-American Studies 290** or **400**).

51c,d. Myth and Heroic Epic of Africa. Spring 1994. MR. HODGE.

A study of the pantheons and tales of gods and heroes from a range of geographical areas and language groups of sub-Saharan Africa. The tales are analyzed for form and content, with some comparisons to relevant classical and European material. *Taught in English.*

[**101b,d. The African Diaspora.**]

[**102b,d. The Autobiography of African America.**]

(Same as **History 131**.)

208b,d. Race and Ethnicity. Fall 1993. MR. McEWEN.

The social and cultural meaning of race and ethnicity, with special emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examines the relationships between race and class. Comparisons between the status of racial and ethnic minorities in the United States and their status in other selected societies. (Same as **Sociology 208**.)

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

241c. The Civil Rights Movement. Fall 1992. MR. LEVINE.

Concentrates on the period from 1954 to 1970 and shows how various individuals and groups have been pressing for racial justice for decades. Special attention is paid to social action groups ranging from the NAACP to the SNCC, and to important individuals, both well known (Booker T. Washington) and less well known (John Doar). Readings mostly in primary sources. Extensive use of the PBS video series "Eyes on the Prize." (Same as **History 243**.)

256c,d. Comparative Slavery. Fall 1992. MR. WELLS.

Examines the comparative evolution of slavery from ancient times through the nineteenth century. After a careful consideration of a number of reference points from the Old World—Ancient Greece, Rome, and Christianity—the bulk of the course investigates slavery in Latin America and the United States. Topics include the nature of slavery; slavery, power, and the legal process; the slave trade; the family; religion; rebellions and everyday forms of resistance; and abolition and its aftermath. (Same as **History 256.**)

261c,d. African Kingdoms. Fall 1992. MR. KILLION.

An introduction to African political and economic development prior to large-scale European penetration of the continent. The principal focus is the relationship between economic growth and social organization in the Sudanic belt, Ethiopia, and Southern Africa before 1800. Topics include the growth of long-distance trade, the origins and structure of divine kingship, the expansion of slavery and serfdom, and the impact of Islam. Readings emphasize original African sources where possible. (Same as **History 261.**)

262c,d. Africa and the Slave Trade: 1500–1850. Spring 1993. MR. KILLION.

The roots of contemporary African economic dependency often are traced to the impact of the Atlantic slave trade during the period from 1500 to 1850. This course focuses on the slave trade from an African perspective, exploring the relationship between the trade and economic and political change in all parts of Africa. (Same as **History 262.**)

[267c,d. Africa under Colonial Rule: 1880–1980.]**275c,d. African-American Fiction by Women.** Fall 1992. MS. SUDAN.

Writers to be studied include Morrison, Walker, Naylor, Angelou, and Bell Hooks. (Same as **English 275.**)

[276c,d. African-American Poetry.]

(Same as **English 276.**)

[335c,d. The African-American Critique of America.]

(Same as **History 335.**)

290b,c. Intermediate Independent Study.**400b,c. Advanced Independent Study and Honors.****CROSS LISTINGS**

(For full course descriptions and prerequisites, see the appropriate department listings.)

Environmental Studies

390. Political Renewal in the Late Twentieth Century—A Critical Assessment of the Contributions of Feminism, Multiculturalism, and Ecology. Fall 1992. MR. RENSENBRINK.

(Same as **Environmental Studies 390** and **Women's Studies 390**.)

Prerequisites: Two or more lower-level courses in one or more of the four interdisciplinary programs, or consent of the instructor. Enrollment limited to 15 students. Preference given to seniors.

Government and Legal Studies

102b. Caribbean Forms. Fall 1992. MR. POTHOLM.

223b,d. African Politics. Fall 1992. MR. POTHOLM.

History

[**264c,d. Muslim Africa.**]

[**265c,d. Southern Africa and European Imperialism.**]

266c,d. Poverty and Development in Africa. Fall 1992. MR. KILLION.

[**361c,d. Greater Ethiopia.**]

Music

121c. History of Jazz. Fall 1992. MR. MCCALLA.

Sociology

[**203b. Families in American Society.**]

[**206b. Urban Sociology.**]

213b. Social Stratification. Spring 1993. MR. ROSSIDES.

215b. Criminology and Criminal Justice. Spring 1993. MR. MCEWEN.

218b. Sociology of Law. Every fall. MR. MCEWEN.

251b. Sociology of Health and Illness. Fall 1993. MS. BELL.

Women's Studies

[**242. Sexuality and Reproduction.**]

Art

Professors

Thomas B. Cornell†

Clifton C. Olds

Mark C. Wethli, *Chair*

Associate Professors

Larry D. Lutchmansingh†

John McKee

Susan E. Wegner, *Director, Art History Division*

Assistant Professors

Linda J. Docherty

Ann A. Lofquist

Visiting Assistant Professor

Julie L. McGee

Visiting Lecturers

James D. Cambronne

Christopher C. Glass

Celeste A. Roberge

The Department of Art comprises two programs: art history and criticism, and studio art. Majors in the department are expected to elect one of these programs. The major in art history and criticism is devoted primarily to the

historical and critical study of the visual arts as an embodiment of some of humanity's highest values and a record of the historical interplay of sensibility, thought, and society. The major in studio art is intended to encourage a sensitive and disciplined aesthetic response to one's culture and personal experiences through the development of perceptual, creative, and critical abilities in visual expression.

Requirements for the Major in Art History and Criticism

The major consists of nine courses, excluding independent study and first-year seminars. Required are **Art 101**; **Art 212** or **226** or a course in classical archaeology; **Art 222, 232, 242, and 252** or **254**; two of **Art 303** through **390**; and one other course chosen from art history courses numbered between 110 and 399. Art history majors are also encouraged to take courses in French and/or German, history, philosophy, religion, and the other arts (literature, music, theater, dance, and the visual arts).

Interdisciplinary Majors

The department participates in interdisciplinary programs in art history and archaeology, and art history and religion. See pages 123–24.

Requirements for the Minor in Art History and Criticism

The minor consists of five courses of which at least three must be at the 200 level and at least one at the 300 level.

The major and the minor in studio art are described on page 44.

COURSES IN THE HISTORY AND CRITICISM OF ART

10c,d. Latin American Arts: Pre-Conquest, Colonial, and Modern. Fall 1992. Ms. WEGNER.

(See page 94 for a full description.)

11c,d. Art, Poetry, and Religion in China and Japan. Spring 1993. MR. OLDS.

(See page 94 for a full description.)

12c. The Art of Portraiture. Spring 1993. Ms. DOCHERTY.

(See page 94 for a full description.)

101c. Introduction to Western Art. Fall 1992. Ms. MCGEE.

A chronological survey of the art of the Western world (Egypt, the Near East, Europe, and the European-based culture of North America), from the Paleolithic period of prehistoric Europe to the present. Considers the historical context of art and its production, the role of the artist in society, style and the problems of stylistic tradition and innovation, and the major themes and symbols of Western art. Required of majors in art history, majors in studio art, and minors in art history. This course is a prerequisite for most upper-level courses in the history of art.

110c.d. Introduction to East Asian Art. Spring 1993. MR. OLDS.

A chronological survey of Chinese, Korean, and Japanese art from prehistoric times to the present. Considers the painting, sculpture, and architecture of East Asia in the context of historical developments and the major religions of the Orient. (Same as **Asian Studies 110.**)

[120c.d. Introduction to South Asian Art.]

(Same as **Asian Studies 120.**)

[204c. History of the Graphic Arts.]

209c. Introduction to Classical Archaeology: Greece. Fall 1993.

MR. SMITH.

A chronological survey of the archaeology of Greece, from the Neolithic to Alexander the Great. Considers the nature of archaeological evidence, and the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes architecture, sculpture, vase painting, and the "minor arts." (Same as **Archaeology 101.**)

210c. Introduction to Classical Archaeology: Rome. Fall 1992.

MR. SMITH.

(Same as **Archaeology 102.**)

(See page 65 for a full description.)

[211c. The Birth of Greek Art.]

(Same as **Archaeology 307.**)

[212c. Medieval Art.]

222c. Art of the Italian Renaissance. Fall 1992. MS. WEGNER.

A survey of the painting, sculpture, and architecture of Italy in the fourteenth, fifteenth, and sixteenth centuries, with emphasis on major masters: Giotto, Masaccio, Donatello, Brunelleschi, Alberti, Botticelli, da Vinci, Raphael, Titian, and Michelangelo.

Prerequisite: **Art 101** or consent of the instructor.

[224c. Mannerism.]

226c. Northern European Art of the Fifteenth and Sixteenth Centuries.

Fall 1992. MR. OLDS.

A survey of the painting of the Netherlands, Germany, and France. Topics include the spread of the influential naturalistic style of Campin, van Eyck, and van der Weyden; the confrontation with the classical art of Italy in the work of Dürer and others; the continuance of a native tradition in the work of Bosch and Bruegel the Elder; the changing role of patronage; and the rise of specialties such as landscape and portrait painting.

Prerequisite: **Art 101** or consent of the instructor.

228c. Notions of Renaissance Women. Spring 1993. MS. MCGEE.

A study of female images in Western European art during the Renaissance. Examines the visual and verbal fashioning of women during this period, as

well as traditional female *topoi*, such as virgins, heroines, witches, and lovers. Readings include popular and literary Renaissance discourses on women and new investigations in the field of gender studies. Artists to be studied include Raphael, Titian, Dürer, Cranach, and Baldung Grien.

232c. Baroque Art. Spring 1993. Ms. WEGNER.

The art of seventeenth-century Europe. Topics include the revolution in painting carried out by Caravaggio, Annibale Carracci, and their followers in Rome; the development of these trends in the works of Rubens, Bernini, Georges de la Tour, Poussin, and others; and the rise of an independent school of painting in Holland. Connections between art, religious ideas, and political conditions are stressed.

Prerequisite: **Art 101** or consent of the instructor.

242c. European Art of the Nineteenth Century. Fall 1992. Ms. DOCHERTY.

A survey of painting and sculpture in Europe from 1750 to 1900, with emphasis on the art of France, England, and Germany. Individual artists are studied in the context of movements that dominated the century: neoclassicism, romanticism, realism, impressionism, post-impressionism, and symbolism. The discourse of art criticism, the relationship between art and society, and the evolution of the avant-garde in this period are also discussed in detail.

Prerequisite: **Art 101** or consent of the instructor.

252c. Modern Art. Spring 1993. Ms. DOCHERTY.

A study of the modernist movement in visual art in Europe and the Americas, beginning with post-impressionism and examining in succession expressionism, fauvism, cubism, futurism, constructivism, Dada, surrealism, the American affinities of these movements, the Mexican muralists, and the Canadian Group of Seven. Modernism is analyzed in terms of the problems presented by its social situation, its relation to other elements of culture, its place in the historical tradition of Western art, and its invocation of archaic, primitive, and Oriental cultures.

Prerequisite: **Art 101, 242**, or consent of the instructor.

[**254c. Contemporary Art.**]

[**262c. American Art from Colonial Times to the Civil War.**]

[**264c. American Art from the Civil War to the Present Day.**]

282c. Modern Architecture. Fall 1992. Ms. MCGEE.

An introduction to modern European and American architecture. Examines practical, social, and aesthetic dimensions related to the development of modern architecture. Special consideration is given to styles and collective movements such as the Bauhaus, the International style, the Chicago school, and postmodernism. Architects to be studied include Frank Lloyd Wright, Le Corbusier, Mies van der Rohe, and Robert Venturi.

Seminars in Art History and Criticism

The seminars are intended to utilize the scholarly interests of members of the department and provide an opportunity for advanced work for selected students who have successfully completed enough of the regular courses to possess a background. Admittance to all seminars requires consent of the instructor. The department does not expect to give all, or in some cases any, seminars in each semester. As the seminars are varied, a given topic may be offered only once, or its form changed considerably from time to time.

322c. Illustrious Lives and Illuminating Theory. Spring 1993.

Ms. MCGEE.

A study of the artist's biography as a literary form. Explores patterns of narration in art theory and art history through biography. Students are encouraged to compare the form of an artist's biography with the content and to question presentation and assumptions of authenticity. Considers literature from antiquity to the eighteenth century—from Pliny to Winckelmann. Readings include Vasari, Van Mander, Bellori, Sandrart, de Piles, and Pacheco.

Prerequisite: **Art 101** or consent of the instructor.

332c. Painting and Poetry. Spring 1993. Ms. WEGNER.

Examines the idea of painting as silent poetry in the Western tradition from Greek vase painting, through Renaissance treatments of myth and allegory, and on into nineteenth-century romanticism and twentieth-century rediscoveries of myth in painting. Emphasis on the epic tradition of Greek narrative and myth as interpreted through the centuries. Artists and writers to be studied include Homer, Ovid, Virgil, Michelangelo, Gentileschi, Rubens, Kauffman, David, Picasso, and Kahlo.

Prerequisite: **Art 101** or consent of the instructor.

334c. Seminar: Studies in the History of Printmaking. Fall 1992.

MR. OLDS.

The origins and development of the graphic arts in Europe and America, including woodcut, engraving, etching, lithography, and related media. Artists to be studied include Dürer, Rembrandt, Goya, Picasso, Munch, Kollwitz, and Warhol. Extensive use is made of the collection of original prints in the Bowdoin College Museum of Art.

Prerequisite: **Art 101**.

342c. Primitivism. Fall 1992. Ms. DOCHERTY.

A study of the modern concept of the "primitive" as an antidote for or alternative to Western civilization. Investigates ways in which the primitive has been defined, where it has been located, why it has been valued, the means artists have used to express it, and the ethical issues raised by such enterprises. Class discussions and individual research projects focus on artists and writers in Europe and America from approximately 1750 to 1950.

Prerequisite: Consent of the instructor.

291c–294c. Intermediate Independent Study in Art History.

ART HISTORY FACULTY.

401c. Advanced Independent Study and Honors in Art History.

ART HISTORY FACULTY.

STUDIO ART**Requirements for the Major in Studio Art**

Eleven courses are required in the department, to include **Art 150**, **160**, **250**, and **260**; four other courses in the studio division, at least one of which must be numbered **270** or higher; **Art 101**; and two other courses in art history. Students undertaking an honors project in their senior year will be required to take **Art 401** in addition to the eleven courses required of the major. Majors are also strongly advised to include study of history, philosophy, religion, literature, and music among their remaining courses.

Requirements for the Minor in Studio Art

The minor consists of six courses: **Art 101**, **150**, **160**, either **250** or **260**, plus two additional studio courses, at least one of which must be numbered **270** or higher.

Studio courses without prerequisite are frequently oversubscribed; preference in enrollment is then given to first- and second-year students as well as to juniors and seniors fulfilling requirements of the studio major or minor.

150c. Drawing I. Fall 1992. Ms. LOFQUIST AND MR. WETHLI. Spring 1993. Ms. LOFQUIST.

An introduction to drawing, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects entail objective observation and analysis of still-life, landscape, and figurative subjects; exploration of the abstract formal organization of graphic expression; and the development of a critical vocabulary of visual principles. Lectures and group critiques augment studio projects in various drawing media.

Enrollment limited to 25 students.

160c. Painting I. Fall 1992. Ms. LOFQUIST. Spring 1993. MR. WETHLI.

An introduction to painting, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects entail objective observation and analysis of still-life, landscape, and figurative subjects; exploration of the painting medium and chromatic structure in representation; and the development of a critical vocabulary of painting concepts. Lectures and group critiques augment studio projects in painting media.

Prerequisite: **Art 150**. Enrollment limited to 25 students.

170c. Printmaking I. Fall 1992. MR. WETHLI.

An introduction to intaglio printmaking, including etching, drypoint, engraving, monotype, and related methods. Studio projects develop creative

approaches to perceptual experience and visual expression that are uniquely inspired by the intaglio medium. Attention is also given to historical and contemporary examples and uses of the medium.

Prerequisite: **Art 150** or consent of the instructor. Enrollment limited to 20 students.

180c. Photography I. Spring 1993. MR. MCKEE.

Photographic visualization and composition as consequences of fundamental techniques of black-and-white still photography. Class discussions and demonstrations, examination of masterworks, and field and laboratory work in 35mm format. Students must provide their own 35mm nonautomatic camera.

Enrollment limited to 32 students.

190c. Architectural Design I. Spring 1993. MR. GLASS.

An introduction to architectural design. Studio projects develop skills in program and context analysis, conceptual design principles and processes, and presentation techniques.

Enrollment limited to 25 students.

195c. Sculpture I. Fall 1992. MS. ROBERGE.

An introduction to the principles, processes, and materials of sculpture. Explores basic technical aspects of working with clay, plaster, cardboard, and wood, as well as the more conceptual aspects of sculptural form and space. Readings and critiques focus on modernistic as well as contemporary issues in sculpture.

Prerequisite: **Art 150**. Enrollment limited to 15 students.

250c. Drawing II. Spring 1993. MS. LOFQUIST.

A continuation of the principles introduced in **Art 150**, with particular emphasis on figurative drawing. Studio projects develop perceptual, creative, and critical abilities through problems involving objective observation, gestural expression and structural principles of the human form, studies from historical and contemporary examples, and exploration of the abstract formal elements of drawing. Lectures and group critiques augment studio projects in various drawing media.

Prerequisite: **Art 150**.

260c. Painting II. Spring 1993. MR. WETHLI.

A continuation of the principles introduced in **Art 160**, with studio problems based on direct experience.

Prerequisite: **Art 160**.

270c. Printmaking II. Spring 1993. MR. CAMBRONNE.

A continuation of the principles introduced in **Art 170**, with particular emphasis on independent projects.

Prerequisite: **Art 170** or consent of the instructor.

280c. Photography II. Fall 1992. MR. McKEE.

Review of the conceptual and technical fundamentals of black-and-white photography and exploration of the different image-making possibilities inherent in related photographic media such as 35mm and view cameras. Seminar discussions and field and laboratory work. Students must provide their own nonautomatic 35mm camera.

Prerequisite: **Art 180** or consent of the instructor.

295c–299c. Intermediate Independent Study in Studio Art.

STUDIO ART FACULTY.

350c–359c. Advanced Studies in Studio Art. Spring 1993. MR. CAMBRONNE.

A continuation of principles introduced in lower division drawing and painting courses, with increasing emphasis on independent projects.

Prerequisite: **Art 250** or **Art 260** or consent of the instructor.

370c. Printmaking III. Spring 1993. MR. CAMBRONNE.

Advanced projects in printmaking.

Prerequisite: **Art 270** or consent of the instructor.

401c. Advanced Independent Study and Honors in Studio Art.

STUDIO ART FACULTY.

Open only to exceptionally qualified senior majors and required for honors credit. Advanced studio projects undertaken on an independent basis, with assigned readings, critical discussions, and a final position paper.

Asian Studies

Professor

John C. Holt**

Associate Professor

G. E. Kidder Smith, Jr., *Director*

Assistant Professors

Sara A. Dickey*

Xiaohong Wen

Visiting Assistant Professors

Nilanjana Chatterjee

Deborah A. Soifer

Lecturer

Takahiko Hayashi

Visiting Lecturer

Takako Ishida

Students in Asian studies focus on the cultural traditions of either East Asia (China and Japan) or South Asia (India and Sri Lanka). In completing the major, each student is required to gain a general understanding of both culture areas, to acquire a working proficiency in one of the languages of South or East Asia, to develop a theoretical or methodological sophistication in one of the disciplines constitutive of Asian studies (e.g., history, religion, literature, anthropology, etc.), and to demonstrate a degree of applied specialization. These principles are reflected in the requirements for an Asian studies major. Student-designed majors focusing on cross-cultural topics in the humanities and/or social sciences are also encouraged. Normally, such student-designed majors will contain a strong disciplinary grounding (e.g.,

four courses in economics), as well as a significant number of relevant courses focused on Asia.

Study Away

Foreign study for students interested in Asian studies is highly recommended. Established programs in Hong Kong, Taiwan, Japan, and the People's Republic of China are available for students interested in East Asia. The ISLE and SITA programs (see pages 32–33) are recommended for students interested in South Asia. Consult the department for information about various programs.

Requirements for the Major in Asian Studies

One can major in Asian studies by focusing on a particular academic discipline (e.g., religion) or by focusing on a particular geographic and cultural area (e.g., South Asia). In both cases, eight courses are required in addition to the study of an Asian language. These eight include **Asian Studies 101**, a senior seminar, and other courses as described below. A student who wishes to graduate with honors in the program must also write an honors thesis, which is normally a one-semester project.

The major requires courses from four categories:

1. *Language*. Two years of an East Asian language or one year of a South Asian language, or the equivalent through intensive language study.

2a. *Discipline-specific courses*. Four courses from a single discipline, one of which is normally a senior seminar. Currently, students may elect anthropology, history, literature, or religion;

or

2b. *Area-specific courses*. Four courses that focus on the student's area of specialization, two in one discipline and two in another. One of these is normally a senior seminar. The possible areas of specialization are Japan, China, and South Asia.

3. Two courses that include a geographic area other than that of one's language concentration. One of these must be **Asian Studies 101**.

4. Two other courses to be chosen in consultation with the student's advisor. If the student has elected a disciplinary track in anthropology or religion, one of these may be **Anthropology 101** or **Religion 101**.

Requirements for the Minor in Asian Studies

Students focus on the cultural traditions of either East Asia or South Asia by completing: (1) **Asian Studies 101**; (2) a concentration of at least three courses in one academic discipline or geographic area; and (3) one elective in Asian studies.

Program Honors

Students contemplating honors candidacy in the program must have established records of B/Honors and A/High Honors in program course

offerings and present clearly articulated, well-focused proposals for scholarly research. Students must prepare an honors thesis and are examined orally by the program faculty.

First-Year Seminars in Asian Studies

10c,d. Art, Poetry, and Religion in China and Japan. Spring 1993.

MR. OLDS.

(Same as **Art 11.**)

(See page 94 for a full description.)

22c,d. Chinese Strategy. Spring 1994. MR. SMITH.

(Same as **History 22.**)

(See page 94 for a full description.)

Introductory, Intermediate, and Advanced Courses

101c,d. Asian Civilizations. Fall 1992. MS. SOIFER.

101b,d. Asian Civilizations. Spring 1993. MS. DICKEY.

Readings in original texts from India, China, and Japan provide the basis for an exploration of basic patterns of thought and cultural expression in South and East Asia.

110c,d. Introduction to East Asian Art. Spring 1993. MR. OLDS.

A chronological survey of Chinese, Korean, and Japanese art from prehistoric times to the present. Considers the painting, sculpture, and architecture of East Asia in the context of historical developments and major religions of the Orient. (Same as **Art 110.**)

[**120c,d. Introduction to South Asian Art.**]

(Same as **Art 120.**)

[**234b,d. Women, Power, and Identity in South Asia.**]

(Same as **Anthropology 234.**)

235b,d. South Asian Cultures and Societies. Fall 1992. MS. CHATTERJEE.

An introduction to cultures and societies of South Asia, including India, Nepal, Pakistan, Bangladesh, and Sri Lanka. Issues of religion, family and gender, caste, and class are examined. The lives of people in this region are explored through ethnographies, novels, and films, as well as in-class simulations of marriage arrangements, religious ritual, and caste ranking. (Same as **Anthropology 235.**)

Prerequisite: Previous course in sociology, anthropology, or Asian studies, or consent of the instructor.

[**237b,d. Relations of Power in India and China.**]

(Same as **Anthropology 237.**)

240c,d. Religion in Ancient India. Fall 1994. MR. HOLT.

Analytic study of religious thought and practice in the formative period of Hinduism as these are reflected in the *Vedas*, the *Upanishads*, the *Yoga Sutras*,

the *Bhagavad Gita*, and the theological and philosophical expositions of Sankara and Ramanuja. (Same as **Religion 220**.)

241c,d. Religion in Medieval and Modern India. Spring 1995. MR. HOLT.

Critical study of the popular character of traditional devotional Hinduism as it emerges in the mythologies of the *Puranas*, in iconography and in the poetry and songs of the *sant* traditions of medieval India. Concomitant consideration of Islam and the emergence of the Sikh tradition, culminating in a study of the nineteenth- and twentieth-century "Hindu renaissance." (Same as **Religion 221**.)

242c,d. Buddhist Thought. Fall 1992. MR. HOLT.

Examines principal categories of Buddhist religious thought as they arise in representative genres of Buddhist literature, especially the Sanskrit *Sutras* of Mahayana tradition. (Same as **Religion 222**.)

Prerequisite: **Religion 101** or **102**, or consent of the instructor.

[243c,d. Buddhism, Culture, and Society.]

(Same as **Religion 223**.)

246c,d. Epic and Mythic Traditions of India. Spring 1993. MS. SOIFER.

Explores the Sanskrit epic and mythic literature of classical Hinduism. Study of the *Mahabharata* and *Ramayana* epics, with emphasis on religious themes. Reading of original myths from the *Puranas*, with attention to themes of cosmology, conflict, divine manifestation, and soteriology, as well as concepts of evil and sexuality. Some discussion of methodology in the study of mythology. (Same as **Religion 226**.)

Prerequisite: **Asian Studies 101/Religion 102** or consent of the instructor.

258b,d. Ethnicity and Politics in South Asia. Spring 1993. MS. AYUBI.

An examination of the historical, cultural, economic, and social forces that affect the political processes in India, Pakistan, Bangladesh, and Sri Lanka. (Same as **Government 227**.)

270c,d. Chinese Thought in the Classical Period. Spring 1994.

MR. SMITH.

An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. (Same as **History 270**.)

271c,d. The Material Culture of China in the Warring States' Period.

Fall 1992. MR. SMITH.

Addresses material culture in China from ca. 400 to 100 B.C., while the great unification of empire was occurring. Topics include what people ate; how they wrote, fought, and built; how we know such things about them; and how this civilization can be compared with others. (Same as **History 271**.)

274c,d. Chinese Society in the Ch'ing. Fall 1993. MR. SMITH.

An introduction to premodern China, focusing on the first half of the

Ch'ing dynasty (1644–1911). Discussion of societal relations, state organization, and ideology. Culminates in a day-long simulation of elite society in the eighteenth century. (Same as **History 274.**)

[275c,d. **Modern Chinese History.**]

(Same as **History 275.**)

276b,d. Chinese Politics. Fall 1992. MR. MANNING.

An introduction to contemporary politics in the People's Republic of China. A brief overview of Chinese history is followed by a survey of contemporary analyses of the Chinese political process. Emphasis is given to Chinese political culture, the major political institutions, current policy issues, and change in the post-Mao era. (Same as **Government 281.**)

[277b,d. **Chinese Foreign Policy.**]

(Same as **Government 284.**)

278c,d. The Foundations of Tokugawa Japan. Spring 1993. MR. SMITH.

Addresses problems in the creation and early development of the Tokugawa (1600–1868) state and society, including the transformation of samurai from professional warriors into professional bureaucrats and the unanticipated growth of a quasi-autonomous urban culture. (Same as **History 278.**)

370c,d. Problems in Chinese History. Every fall. MR. SMITH.

Reviews the whole of Chinese history. Students develop their research skills and write a substantial research paper. (Same as **History 370.**)

290c. Intermediate Independent Study.

400c, 401c. Advanced Independent Study and Honors.

LANGUAGE COURSES

Chinese 101c. Beginning Chinese I. Every fall. MS. WEN.

An introduction to Putonghua (Mandarin) and the written language. Five hours of class per week, plus assigned language laboratory.

Chinese 102c. Beginning Chinese II. Every spring. MS. WEN.

A continuation of **Chinese 101.**

Chinese 203c. Intermediate Chinese I. Every fall. MS. WEN.

A continuation of **Chinese 102.** Five hours of class per week, plus assigned language laboratory.

Chinese 204c. Intermediate Chinese II. Every spring. MS. WEN.

A continuation of **Chinese 203.**

[**Chinese 307c. Introduction to Classical Chinese I.**]

Chinese 308c. Introduction to Classical Chinese Language and Literature. Every spring. MS. WEN.

A continuation of **Chinese 307.**

Japanese 101c. Beginning Japanese I. Every fall. MR. HAYASHI.

An introduction to standard modern Japanese. Five hours per week, plus assigned language laboratory.

Japanese 102c. Beginning Japanese II. Every spring. MR. HAYASHI.

A continuation of Japanese 101.

Japanese 203c. Intermediate Japanese I. Every fall. MR. HAYASHI.

A continuation of Japanese 102. Five hours per week, plus assigned language laboratory.

Japanese 204c. Intermediate Japanese II. Every spring. MR. HAYASHI.

A continuation of Japanese 203.

Japanese 205c. Intermediate Japanese III. Fall 1992. MS. ISHIDA.

Third year of modern Japanese. Grammar review and readings in newspapers and contemporary literature. Frequent writing of short essays. Maintenance of aural/oral proficiency.

Japanese 206c. Intermediate Japanese IV. Spring 1993. MS. ISHIDA.

A continuation of Japanese 205.

[Sanskrit 101c. Introductory Sanskrit I.]

[Sanskrit 102c. Introductory Sanskrit II.].

Biochemistry

Administered by the Committee on Biochemistry

Professors

John L. Howland

David S. Page

William L. Steinhart, *Chair of Committee*

Associate Professor

C. Thomas Settlemire

Requirements for the Major in Biochemistry

All majors must complete the following courses: **Biology 101, Biology (Chemistry) 261, 262; Chemistry 109, 225, 226, 251; Mathematics 161, 171; and Physics 103.** Students should normally complete the required biochemistry core courses by the end of their junior year. Majors must complete three courses from the following: **Biology 113, 114, 116, 201, 202, 222, 302, 304, 306, 308, 400; Chemistry 210, 240, 252, 270, 330, 400; Physics 223, 227, 228, 260, 400.** In addition, majors must complete one of the following: **Biology 212, 213, or 215.** Students may include as electives up to two 400 courses. Finally, a student intending to carry out a laboratory independent study course in biochemistry should first take **Biology 212, 213, or 215.** Students taking independent study courses for the biochemistry major should register for **Biochemistry 401, 402, etc.**

Biology

Professors

John L. Howland
William L. Steinhart

Visiting Professor

Clarice M. Yentsch

Associate Professors

Patsy S. Dickinson*
Carey R. Phillips†
C. Thomas Settlemyre, *Chair*
Nathaniel T. Wheelwright

Assistant Professor

Amy S. Johnson†

Visiting Assistant Professors

Bradford O. Bratton
Nancy G. Kravit

Laboratory Instructors

Pamela J. Bryer
Alan Garfield
Stephen Hauptman

Requirements for the Major in Biology

The major consists of seven semester courses in the department exclusive of courses in the 400 series. Majors are required to complete five core courses, including **Biology 101** and **102** and three of the following: **Biology 113**, **114**, **115**, and **116**. Majors are also required to complete two other courses within the department, one of which must be either a 200-level course with a laboratory or a 300-level course. In addition, majors must complete **Mathematics 161**, **Physics 103**, and **Chemistry 225**. Students are advised to complete **Biology 101** and **102** and the mathematics, physics, and chemistry courses by the end of the sophomore year. Students planning postgraduate education in science or in the health professions should note that graduate and professional schools are likely to have additional admissions requirements in mathematics, physics, and chemistry.

Interdisciplinary Major

The department participates in interdisciplinary programs in biochemistry and neuroscience. See pages 51 and 137–38.

Requirements for the Minor in Biology

The minor consists of four courses within the department at the 100 level or above, appropriate to the major.

11a. Ancient Biology and Medicine. Fall 1992. MR. HOWLAND.

(See page 95 for a full description.)

52a. Horticulture. Spring 1993. MR. STEINHART.

An introduction to ornamental horticulture and the cultivated plants of agriculture. Topics include basic plant physiology, anatomy, and taxonomy relevant to horticulture; the effects of environmental factors on plant growth; cultivation and propagation of plants; the history of plant science and the origins of plants of horticultural interest; plant pests and diseases; and landscape and greenhouse design. Topics in economic botany and ethnobotany, such as plant sources of structural materials, fibers, dyes, drugs, and spices, are also discussed. Three hours of lecture/demonstration each week, plus occasional laboratory meetings or field trips.

54a. Concepts in Ecology and Evolutionary Biology. Every other spring. Spring 1994. MR. WHEELWRIGHT.

An overview of evolution, the unifying concept in biology, and an application of evolutionary and ecological principles to environmental problems. Lectures deal with the evolutionary patterns, emphasizing the mechanisms of natural and sexual selection. Ecological concepts relating to conservation biology are discussed, with a focus on tropical ecosystems. Field trips illustrate ecological concepts and introduce students to the natural history of Maine. Optional field trip to the Bowdoin Scientific Station on Kent Island.

Designed for nonmajors; not open to students who have taken Biology 101 or 102. Enrollment limited to 75 students.

101a. Introductory Cell Biology. Every fall. THE DEPARTMENT.

Examination of fundamental biological phenomena, with special reference to cells. Topics include ultrastructure, growth and metabolism, cell division and molecular genetics, early development, immunology, membrane transport, and the interaction between viruses and host cells. Lectures and three hours of laboratory work per week. Understanding of high school chemistry is assumed.

102a. Biology of Organisms and Populations. Every spring.

THE DEPARTMENT.

A study of the properties of organisms and populations, with evolution as a central, unifying theme. Topics include the origin of life; the mechanisms of evolution; a survey of the kingdoms of living organisms; the physiology, morphology, and development of animals and plants; and the effects of the environment on populations. Lectures and three hours of laboratory work per week.

Prerequisite: **Biology 101.**

113a. Genetics and Molecular Biology. Every fall. MR. STEINHART.

Integrated coverage of organismic and molecular levels of the genetics of eucaryotes and procaryotes. Topics include the structure and function of chromosomes, the mechanisms and control of gene expression, recombination, mutagenesis, the determination of gene order and sequence, and genetic engineering applications. Occasional problem-solving sessions are scheduled.

Prerequisite: **Biology 101.**

114a. Comparative Physiology. Every spring. MS. DICKINSON.

The relationship between structure and function in organ systems and in invertebrates and vertebrates as a whole. The interdependency of organ systems is considered. Lectures and four hours of laboratory work or conferences per week.

Prerequisite: **Biology 102.**

115a. Ecology. Every fall. MR. WHEELWRIGHT.

Principles concerning the interactions between organisms and their environment. Topics include population growth and structure, processes of speciation, succession, energy flow, biogeochemical cycling, and the influence of competition, predation, and other factors on the abundance and distribution of plants and animals. Laboratory sessions, field trips, and group research projects emphasize the natural history of local plants and animals (both marine and terrestrial) and their interactions. Optional trip to the Bowdoin Scientific Station on Kent Island.

Prerequisite: **Biology 102.**

116a. Developmental Biology. Every spring. MS. KRAVITZ.

An examination of current concepts of embryonic development, with emphasis on their experimental basis. Topics include morphogenesis and functional differentiation, tissue interaction, nucleocytoplasmic interaction, differential gene expression, and interaction of cells with hormones and extracellular matrix. Project-oriented laboratory work emphasizes experimental methods. Lectures and three hours of laboratory per week.

Prerequisite: **Biology 102.**

156a. Marine Ecology. Fall 1992. MR. GILFILLAN.

The relationships between organisms and their environment are considered in the context of animals and plants living in the sea. The concept of marine communities living in dynamic equilibrium with their physical-chemical environment is introduced, and the influences of human activities on the ecology of marine organisms is explored. (Same as **Environmental Studies 200.**)

Prerequisite: A college-level science course or consent of the instructor.

160a. Marine Invertebrate Zoology. Every other spring. Spring 1994.

Ecology, morphology, and evolution of marine invertebrates, with emphasis on field and laboratory studies. Representatives of all major and most minor phyla are collected, observed alive, and studied in some detail. Emphasis is on function and phylogeny. Lectures, three hours of laboratory or field work per week, and an individual research project are required.

Prerequisite: **Biology 102.**

163a. Biology of Marine Organisms. Every fall. Fall 1992. MS. YENTSCH.

The study of the biology and ecology of marine mammals, seabirds, fish, intertidal and subtidal invertebrates, algae, and plankton. Also considers the biogeographic consequences of global and local ocean currents on the evolution and ecology of marine organisms. Laboratories, field trips, and group research projects emphasize natural history, functional morphology, and ecology. Lectures and three hours of laboratory or field trip per week. One weekend field trip included.

Prerequisite: **Biology 102.**

174a. Animal Behavior. Spring 1993. MR. BRATTON.

An introduction to the behavior of animals studied from the perspective of physiology, genetics, evolution, ecology, and neuroethology. Topics include the evolution of behavior, learning and instincts, imprinting, communication, reproductive behaviors, migration and navigation. Students design and present their own laboratory projects designed to illustrate principles of animal behavior through laboratory and field experimentation and observation. Three hours of lecture and a three-hour laboratory meeting or field trip per week.

201a. Microbiology. Fall 1992. MR. SETTLEMIRE.

An examination of the structure and function of microorganisms, primarily bacteria, with a major emphasis on molecular descriptions. Subjects covered include structure, metabolism, mechanism of action of antibiotics, and basic virology. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 213** and **215**.

Prerequisites: **Biology 102** and **Chemistry 225**.

202a. Immunology. Spring 1993. MR. SETTLEMIRE.

Covers the development of the immune response, the cellular physiology of the immune system, the nature of antigens, antibodies, B and T cells, and the complement system. The nature of natural immunity, transplantation immunology, and tumor immunology are also considered. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 212**.

Prerequisite: **Biology 102**.

203a. Comparative Neurobiology. Fall 1992. MR. BRATTON.

A comparative study of the function of the nervous system in invertebrate and vertebrate animals. Topics include the physiology of individual nerve cells and their organization into larger functional units, the behavioral responses of animals to cues from the environment, and the neural mechanisms underlying such behaviors. Lectures and four hours of laboratory work per week.

Prerequisite: **Biology 102**. **Biology 114** is recommended.

205a. Biomechanics. Spring 1995.

Examines the quantitative and qualitative characterization of organismal morphology, and explores the relationship of morphology to measurable components of an organism's mechanical, hydrodynamic, and ecological environment. Lectures, labs, field trips, and individual research projects emphasize (1) analysis of morphology, including analyses of the shape of individual organisms as well as of the mechanical and molecular organization of their tissues; (2) characterization of water flow associated with organisms; and (3) analyses of the ecological and mechanical consequences to organisms of their interaction with their environment.

Prerequisite: **Biology 102**. Introductory physics and calculus strongly recommended.

[206a. Cell Physiology.]

208a. Ornithology. Every other spring. Spring 1993. MR. WHEELWRIGHT.

Advanced study of the biology of birds, including anatomy, physiology, distribution, and classification, with an emphasis on avian ecology and evolution. Through integrated laboratory sessions, field trips, and an independent research project, students learn identification of birds, functional morphology, and research techniques such as experimental design, behavioral observation, and field methods. Optional field trip to the Bowdoin Scientific Station on Kent Island.

Prerequisites: **Biology 102** and/or **115**, or consent of the instructor.

212a. Laboratory in Molecular Biology and Biochemistry. Every spring. MR. HOWLAND.

Experiments employing contemporary techniques in molecular biology and biochemistry. Emphasis on isolation and physical properties of nucleic acids, isolation and kinetics of enzymes, and composition and activities of biological membranes. Techniques studied and used include radioisotopes, spectrophotometry, electrophoresis, chromatography, scanning electron microscopy, and the use of microcomputers. This course is a logical precursor to independent study in the areas of molecular biology and biochemistry.

Prerequisites: Two courses from **Biology 113, 201, 261, or 262**.

213a. Laboratory in Microbiology, Cell Biology, and Immunology. Fall 1993. MR. SETTLEMIRE.

Lectures and laboratories to include culture and experimental investigation of the properties of procaryotic and eucaryotic cells. Techniques to be used include tissue culture; light, fluorescence, and electron microscopy; cytometric assays of cell properties; and several immunochemistry principles, including immunoelectrophoresis and enzyme-linked assays. One to two hours of lecture and three to six hours of laboratory per week. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in laboratory courses. This course is a logical precursor to independent study in cellular and molecular biology.

Prerequisites: Previous or concurrent enrollment in **Biology 113, 116, 201, or 202**.

215a. Laboratory in Molecular and Cellular Genetics. Fall 1992. MR. STEINHART.

Lectures and experiments focusing on the concepts and techniques of contemporary molecular and cellular genetics. One to two hours of lecture and three to six hours of laboratory per week. This course is a logical precursor to independent study in the areas of cellular and molecular biology.

Prerequisite: Previous or concurrent enrollment in **Biology 113**, or consent of the instructor.

222a. Plant Physiology. Spring 1994. MR. STEINHART.

Topics include the nature and control of growth and differentiation, nutrition, water and nutrient translocation, metabolism, hormone physiology, and physiological ecology of plants. Laboratory work stresses the association of structure and function in tissues and organs of higher plants, and includes self-designed projects. Lectures and three hours of laboratory per week.

Prerequisite: **Biology 102.**

261a. Biochemistry I. Every fall. MR. HOWLAND.

Proteins and enzymes. An introduction to the chemistry and biology of small biological molecules, macromolecules, and membranes. Emphasis on kinetics and mechanisms of enzymic reactions and upon equilibrium and non-equilibrium thermodynamics underlying biological processes. (Same as **Chemistry 261.**)

Prerequisite: **Chemistry 226.**

262a. Biochemistry II. Every spring. MR. PAGE.

(See **Chemistry 262**, page 61.)

302a. Virology. Spring 1994. MR. STEINHART.

A study of plant and animal viruses, beginning with lectures on fundamental virology and followed by student-led seminars based on the primary literature. Covers taxonomy, structure, replication, pathogenesis, and epidemiological aspects of viruses.

Prerequisite: **Biology 113 or 201.**

303a. Advanced Developmental Biology. Fall 1993. MR. PHILLIPS.

The study of the principles and processes of embryonic and post-embryonic animal development, stressing mechanisms of cell and tissue interaction and morphogenesis. Students read original journal articles and participate in discussions. Laboratory projects include the use of the scanning electron microscope to study a specific developmental question.

Prerequisites: **Biology 116** and consent of the instructor.

304a. Topics in Biochemistry and Molecular Biology. Spring 1993.

MR. HOWLAND.

A seminar that deals, at different times, with such topics as biological energetics, membrane biochemistry, medical genetics, the molecular biology of development, and plant molecular biology.

305a. Neuroethology. Fall 1993. MS. DICKINSON.

A study of the neuronal control of behavior, emphasizing the roles of specific neuronal properties and interactions in sensory processing, controlling motor output, and learning. Students read and discuss original journal articles and conduct laboratory projects on the control of relatively simple behaviors.

Prerequisite: **Biology 114, 203, or Psychobiology 265**, or permission of the instructor.

306a. Advanced Molecular Genetics. Spring 1993. MR. STEINHART.

A seminar focusing on the application of the methods of contemporary molecular genetics and biotechnology to fundamental problems of plant and animal biology. Topics include cellular differentiation, hormonal regulation, responses to environmental stress and disease, cell transformation, agricultural and medical applications of genetic engineering, and new approaches in population and human genetics. Reading and discussion of articles from the primary literature.

Prerequisite: **Biology 113**.

308a. Biochemical Endocrinology. Spring 1994. MR. SETTLEMIRE.

A study of how the endocrine system is involved in the regulation of metabolism and development, with an emphasis on the biochemical mechanisms. The processes involved in the production and release of the hormones are also examined. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 212**.

Prerequisite: **Biology 261**.

400a. Independent Study and Honors. THE DEPARTMENT.

Chemistry

Professors

Samuel S. Butcher
Ronald L. Christensen
Jeffrey K. Nagle
Davis S. Page, *Chair*

Adjunct Professor

Edward S. Gilfillan

Assistant Professors

Elizabeth A. Stemmler†
Peter K. Trumper

Director of Laboratories

Judith C. Foster

Laboratory Instructors

Rene L. Bernier, *Laboratory Support Manager*
Beverly G. DeCoster
Paulette M. Fickett
Colleen T. McKenna

Joint Appointment with Biology

Associate Professor C. Thomas Settlemyre

Courses at the 50 level are introductory, do not have prerequisites, and are appropriate for nonmajors. Courses at the 100 level are introductory without formal prerequisites and lead to advanced-level work in the department. Courses 200 through 259 are at the second level of work and generally require only the introductory courses as prerequisites. Courses 260 through 290 are normally taken in the junior year and have two or more courses as prerequisites. Courses 300 through 390 normally are taken in the junior or senior year and have two or more courses as prerequisites.

Requirements for the Major in Chemistry

The required courses are **Chemistry 109, 210, 225, 226, 240, 251, 252, 254**, and any two courses at the 300 level or above. Students with high school backgrounds in chemistry are expected to begin with **Chemistry 109**. **Chemistry 101** is an introductory course for students without prior experience with chemistry. In addition to these chemistry courses, chemistry majors also are required to take **Physics 103** and **Mathematics 161** and **171**.

Because the department offers programs based on the interests and goals of the student, a prospective major is encouraged to discuss his or her plans with the department as soon as possible. The chemistry major can serve as preparation for many career paths after college, including the profession of chemistry, graduate studies in other branches of science, medicine, secondary school teaching, and many fields in the business world. Advanced electives in chemistry (**Chemistry 301** and **340**), along with additional courses in mathematics and physics, also allow students to meet the formal requirements of the American Chemical Society–approved chemistry major. Students interested in this program also should consult with the department as soon as possible.

The department encourages its students to round out the chemistry major with relevant courses in other departments, depending on individual needs. These might include electives in other departments that provide extensive opportunities for writing and speaking, or courses concerned with technology and society, to name a few areas. Students interested in providing a particular interdisciplinary emphasis to their chemistry major should consider additional courses in biology and biochemistry, computer science, economics, education, geology, mathematics, or physics.

Independent Study

A student wishing to conduct a laboratory independent study project (**Chemistry 400**) must have taken at least one of the following courses: **Chemistry 254**, **Biology 211**, or **Biology 212**.

Interdisciplinary Majors

The department participates in interdisciplinary programs in biochemistry, chemical physics, and geology and chemistry. See pages 51 and 124.

Requirements for the Minor in Chemistry

The minor consists of five chemistry courses appropriate to the major.

[50a. Topics in Chemistry.]

101a. Introductory Chemistry. Every spring. MR. NAGLE.

Designed for students with no prior experience in chemistry. An introduction to the states of matter and their properties; the mole concept and stoichiometry; selected properties of the elements. Lectures, conferences, and three hours of laboratory work per week.

109a. General Chemistry. Every fall. MR. BUTCHER AND MR. NAGLE.

Introduction to models for chemical bonding and intermolecular forces; characterization of systems at equilibrium and spontaneous processes, including oxidation and reduction; rates of chemical reactions. Lectures, conferences, and three hours of laboratory work per week.

Prerequisite: A secondary school course in chemistry or **Chemistry 101**.

210a. Quantitative Analysis. Fall 1992. MR. BUTCHER.

Methods of separating and quantifying inorganic and organic compounds using volumetric, spectrophotometric, electrometric, and gravimetric techniques are covered. Fundamentals of gas and liquid chromatography and the statistical analysis of data are addressed. Lectures and four hours of laboratory work per week.

Prerequisite: **Chemistry 109** (or **Chemistry 102** for those students matriculated before 1992.)

225a. Elementary Organic Chemistry. Fall 1992. MR. TRUMPER.
Every spring. MR. PAGE.

An introduction to the chemistry of the compounds of carbon. Provides the foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work per week.

Prerequisite: **Chemistry 109**.

226a. Organic Chemistry. Spring 1993. MR. TRUMPER.
Every fall thereafter. MR. TRUMPER.

A continuation of the study of the compounds of carbon. **Chemistry 225** and **226** cover the material of the usual course in organic chemistry and form a foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work per week.

Prerequisite: **Chemistry 225**.

[230a–239a. Intermediate Topics in Chemistry.]**240a. Inorganic Chemistry.** Fall 1992. MR. NAGLE.

An introduction to the chemistry of the elements. Chemical bonding and its relationship to the properties and reactivities of coordination compounds, organometallic compounds, and covalent and ionic solids are emphasized. Topics in bioinorganic and environmental inorganic chemistry are included. Provides a foundation for further work in inorganic chemistry and biochemistry. Lectures and four hours of laboratory work per week.

Prerequisites: **Chemistry 102** or **109**.

251a. Physical Chemistry I. Every fall. MR. CHRISTENSEN.

Thermodynamics and its application to chemical changes and equilibria that occur in the gaseous, solid, and liquid states. Macroscopic behavior of chemical systems is related to molecular properties by means of the kinetic theory of gases and statistical mechanics. Also included is the study of chemical kinetics.

Prerequisites: **Chemistry 102** or **109**, **Physics 103**, **Mathematics 171**, or consent of the instructor. **Mathematics 181** is recommended.

252a. Physical Chemistry II. Every spring. MR. CHRISTENSEN.

Development and principles of quantum mechanics with applications to atomic structure, chemical bonding, chemical reactivity, and molecular spectroscopy.

Prerequisite: **Chemistry 251** or consent of the instructor. **Mathematics 181** is recommended.

254a. Physical Chemistry Laboratory. Every spring. MR. CHRISTENSEN.

Experiments in thermodynamics, kinetics, spectroscopy, and quantum chemistry. Modern experimental methods, including digital electronics, computer-based data acquisition, and the use of pulsed and continuous lasers, are used to verify and explore fundamental concepts of physical chemistry. Emphasis on a modular approach to experimental design and the development of scientific writing skills. Lectures and four hours of laboratory work per week.

Prerequisites: **Chemistry 251** and **252** (generally taken concurrently).

261a. Biochemistry I. Every fall. MR. HOWLAND.

(See **Biology 261**, page 57.)

262a. Biochemistry II. Every spring. MR. PAGE.

An introduction to metabolism. Topics include pathways in living cells by which carbohydrates, lipids, amino acids, and other important biomolecules are broken down to produce energy and biosynthesized. (Same as **Biology 262**.)

Prerequisite: **Chemistry 226** and **261**.

270a. Molecular Structure Determination in Organic Chemistry.

Spring 1993. MR. TRUMPER.

Theory and applications of spectroscopic techniques useful for the determination of organic structures. Mass spectrometry and infrared, ultraviolet-visible, and nuclear magnetic resonance (NMR) spectroscopy are discussed. Heavy emphasis is placed on applications of multiple-pulse Fourier transform NMR spectroscopic techniques. Lectures and up to two hours of laboratory work per week.

Prerequisite: **Chemistry 226**.

[**310a. Instrumental Analysis.**]

[**320a. Advanced Organic Chemistry.**]

330a–339a. Advanced Topics in Chemistry.

330a. Bioorganic Chemistry. Fall 1992. MR. PAGE.

An introduction to structure and mechanism in bioorganic chemistry. Concepts and methods of physical organic chemistry are applied toward understanding the factors that govern the catalysis of reactions by enzymes.

Prerequisites: **Chemistry 226** and **251**, or consent of the instructor.

331a. Atmospheric Chemistry. Spring 1993. MR. BUTCHER.

After an introduction to fundamental atmospheric processes, the course examines the role of the atmosphere in biogeochemical cycles and selected contemporary issues (greenhouse effect and climate, ozone depletion, stressing of the oxidizing capacity).

Prerequisite: **Chemistry 251** or consent of the instructor.

[340a. Advanced Inorganic Chemistry.]

Interested students should contact Mr. Nagle.

290a. Intermediate Independent Study. THE DEPARTMENT.**400a. Advanced Independent Study and Honors.** THE DEPARTMENT.

For students intending to conduct a laboratory research project, one of **Chemistry 254**, **Biology 211**, or **Biology 212** is required.

Classics

Professor

John W. Ambrose, Jr.

Associate Professor

Barbara W. Boyd, *Chair*

Assistant Professor

D. Neel Smith

Instructor

Stephen A. Hall

The Department of Classics offers two major programs: one with a focus on language and literature (classics), and one with a focus on classical archaeology (classics/archaeology). Students pursuing either major are encouraged to study not only the languages and literatures but also the physical monuments of Greece and Rome. This approach is reflected in the requirements for the two major programs: for each, requirements in Greek and/or Latin and in classical archaeology must be fulfilled.

Classics

The classics program is arranged to accommodate both those students who have studied no classical languages and those who have had extensive training in Latin and Greek. The objective of classics courses is to study the ancient languages and literatures in the original. By their very nature, these courses involve students in the politics, history, and philosophies of antiquity. Advanced language courses focus on the analysis of textual material and on literary criticism.

Requirements for the Major in Classics

The major in classics consists of ten courses. At least six of the ten courses are to be chosen from offerings in Greek and Latin and should include at least two courses in Greek or Latin at the 300 level; one of the remaining courses should be **Archaeology 101** or **102**. Students concentrating in one of the

languages are encouraged to take at least two courses in the other. No more than one classics course numbered in the 50s may be counted toward the major.

Classics/Archaeology

Within the broader context of classical studies, the classics/archaeology program pays special attention to the physical remains of classical antiquity. Students studying classical archaeology should develop an understanding of how archaeological evidence can contribute to our knowledge of the past, and of how archaeological study interacts with such related disciplines as philology, history, and art history. In particular, they should acquire an appreciation for the unique balance of written and physical sources that makes classical archaeology a central part of classical studies.

Requirements for the Major in Classics/Archaeology

The major in classics/archaeology consists of ten courses. At least five of the ten courses are to be chosen from offerings in archaeology, and should include **Archaeology 101, 102**, and at least one archaeology course at the 300 level. At least four of the remaining courses are to be chosen from offerings in Greek and Latin, and should include at least one at the 300 level. No more than one classics course numbered in the 50s may be counted toward the major.

Interdisciplinary Major

The department participates in an interdisciplinary program in archaeology and art history. See page 123.

Requirements for the Minor

Students may choose a minor in one of five areas:

1. *Greek*: Five courses in the department, including at least four in the Greek language;
2. *Latin*: Five courses in the department, including at least four in the Latin language;
3. *Classics*: Five courses in the department, including at least four in the classical languages; of these four, one should be either **Greek 204** or **Latin 205**;
4. *Archaeology*: Six courses in the department, including either **Archaeology 101** or **102**, one archaeology course at the 300 level, and two other archaeology courses;
5. *Classical Civilization* (Greek or Roman): Six courses, including
 - a. —for the Greek civilization concentration:
two courses in the Greek language;
Archaeology 101;
one of the following: **Classics 11** (or any other appropriate first-year

seminar), **51**, or **52**; or **Philosophy 111**; or **Government 240**; or **History 201**;

and two of the following: **Archaeology 201, 203**, or any 300-level archaeology course focusing primarily on Greek material; **Philosophy 331 or 335**; **Classics 290** (Independent Study) or any 200- or 300-level Greek or classics course focusing primarily on Greek material.

b. —for the Roman civilization concentration:

two courses in the Latin language;

Archaeology 102;

one of the following: **Classics 11** (or any other appropriate first-year seminar) or **51**; or **Philosophy 111**; or **Government 240**; or **History 202**;

and two of the following: **Archaeology 202, 204**, or any 300-level archaeology course focusing primarily on Roman material; or **Classics 290** (Independent Study) or any 200- or 300-level Latin or classics course focusing primarily on Roman material.

Other courses in the Bowdoin curriculum may be applied to this minor if approved by the Classics Department.

Classics and Archaeology at Bowdoin and Abroad

Archaeology classes regularly use the outstanding collection of ancient art in the Bowdoin College Museum of Art. Of special note are the exceptionally fine holdings in Greek painted pottery and the very full and continuous survey of Greek and Roman coins. In addition, there are numerous opportunities for study or work abroad. Bowdoin is a participating member of the Intercollegiate Center for Classical Studies in Rome, where students in both major programs can study in the junior year (see page 32). It is also possible to receive course credit for field experience on excavations. Interested students should consult members of the department for further information.

Students contemplating graduate study in classics or classical archaeology are advised to begin the study of at least one modern language in college, as most graduate programs require competence in French and German as well as in Latin and Greek.

ARCHAEOLOGY

Archaeology 101 and **102** are offered in alternate years.

101c. Introduction to Classical Archaeology: Greece. Fall 1993.

MR. SMITH.

A chronological survey of the archaeology of Greece, from the Neolithic to Alexander the Great. Considers the nature of archaeological evidence, and the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes architecture, sculpture, vase painting, and the "minor arts." (Same as **Art 209**.)

102c. Introduction to Classical Archaeology: Rome. Fall 1992.

MR. SMITH.

The archaeology of the Hellenistic kingdoms and Rome, from Alexander the Great to Constantine. First, attempts to define characteristic features of Hellenistic culture, then traces the emergence of a distinctively Roman civilization from both this background and native Italic traditions. Considers the nature of archaeological evidence, and the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes mural painting, architecture, sculpture, and the "minor arts." (Same as **Art 210.**)

At least one of the following 200-level courses will be offered each year:

[201c. Athens, the "School of Hellas."](Same as **Classics 201.**)**[202c. Rome of the Caesars.]**(Same as **Classics 202.**)**203c. Greek Religion.** Spring 1993. MR. SMITH.

The ancient Greek language had no word for "religion," and for the ancient Greek, piety was more a matter of correct ritual action than of belief. Archaeology provides vital documentation of the historical ritual activity of the Greeks (often in contrast to their own mythical accounts). This course surveys the diverse primary sources (archaeological, literary, epigraphic) and considers various recent approaches to interpretation. (Same as **Classics 203.**)

204c. Pompeii: Everyday Life in A.D. 79. Spring 1994. MR. SMITH.

The archaeological record of Pompeii and the neighboring towns of the Bay of Naples is unique in the range and completeness of its testimony about domestic, economic, religious, social, and political life in the first century A.D. Material considered ranges from architecture and sculpture to wall painting, graffiti, and the floral remains of Pompeian gardens. (Same as **Classics 204.**)

At least one of the following 300-level courses will be offered each year:

301c. Greek Painting and Mosaic. Spring 1994. MR. SMITH.

Primary focus is on black-figure and red-figure vase painting, which is well represented in the Bowdoin College Museum of Art. Topics include the role of connoisseurship in criticism; the nature of the vase painting industry in Athens; the relation of vase painting to monumental painting and mosaics; and recent approaches to interpreting iconography.

Prerequisite: **Archaeology 101.**

302c. Greek and Roman Numismatics. Spring 1993. MR. SMITH.

Surveys Greek and Roman coinage by examining a series of problems ranging chronologically from the origins of coinage in the seventh century B.C. to the late Roman empire. One class each week is held in the Bowdoin

College Museum of Art, and course assignments are based on coins in the collection.

Prerequisite: Archaeology 101 or 102.

[303c. Criticism and Aesthetic Theory in Antiquity.]

[307c. The Birth of Greek Art.]

(Same as Art 211.)

CLASSICS

First-Year Seminar in Classics

13c. Slavery in the Ancient Mediterranean World. Fall 1992. MR. SMITH.
(See page 95 for a full description.)

51c. Classical Mythology. Fall 1992. MS. BOYD.

Focuses on the mythology of the Greeks and the use of myth in classical literature. Other topics considered are recurrent patterns and motifs in Greek myths; a cross-cultural study of ancient creation myths; the relation of mythology to religion; women's roles in myth; and the application of modern anthropological, sociological, and psychological theories to classical myth. Concludes with an examination of Ovid's use of classical mythology in the *Metamorphoses*.

[52c. Greek Literature in Translation.]

[201c. Athens, the "School of Hellas."]
(Same as Archaeology 201.)

[202c. Rome of the Caesars.]
(Same as Archaeology 202.)

203c. Greek Religion. Spring 1993. MR. SMITH.
(Same as Archaeology 203.)

204c. Pompeii: Everyday Life in A.D. 79. Spring 1994. MR. SMITH.
(Same as Archaeology 204.)

[221c. Women in the Life and Literature of Classical Antiquity.]

222c. Sexuality and Society in Greece and Rome. Spring 1993. MR. HALL.

An examination of the ways in which the cultural construct of sexuality was perceived and institutionalized in ancient Greece and Rome. Particular attention is paid to the close relationship of social status to sexual roles, to ancient definitions of "natural" and "deviant" behavior, and to representation of such distinctions in literary, visual, legal, medical, and philosophical material. Authors to be read in translation include Sappho, Aristophanes, Plato, Catullus, Ovid, Petronius, and Juvenal.

GREEK

101c. Elementary Greek. Every fall. MR. AMBROSE.

A thorough presentation of the elements of accidence and syntax based, insofar as possible, on unaltered passages of classical Greek.

102c. Elementary Greek. Every spring. MR. AMBROSE.

A continuation of **Greek 101**. During this term, a work of historical or philosophical prose is read.

203c. Plato. Every fall. MR. HALL.

204c. Homer. Every spring. MS. BOYD.

One of the following advanced Greek courses will be offered each semester:

301c. Homer: *The Odyssey*. Spring 1993. MR. AMBROSE.

[**302c. Lyric and Elegiac Poetry.**]

[**303c. The Historians.**]

[**304c. Comedy.**]

305c. Tragedy. Fall 1993. MR. AMBROSE.

Focuses on the works of Aeschylus, Sophocles, or Euripides. This course may be repeated for credit with the contents changed.

306c. Plato and Aristotle. Fall 1992. MR. AMBROSE.

307c. The Orators. Spring 1994. MR. AMBROSE.

[**308c. The Alexandrian Age.**]

LATIN

101c. Elementary Latin. Every fall. MR. HALL.

A thorough presentation of the elements of Latin grammar. Emphasis is placed on achieving a reading proficiency.

102c. Elementary Latin. Every spring. MS. BOYD.

A continuation of **Latin 101**. During this term, readings are based on unaltered passages of classical Latin.

203c. Intermediate Latin for Reading. Fall 1992. MR. AMBROSE.

A review of the essentials of Latin grammar and syntax and an introduction to the reading of Latin prose and poetry. Materials to be read change from year to year, but always include a major prose work and excerpts from Latin poetry.

Prerequisite: **Latin 102** or two to three years of high school Latin.

204c. Studies in Latin Literature. Every spring. MR. SMITH.

An introduction to different genres and themes in Latin literature. The subject matter and authors covered may change from year to year (e.g., selections from Virgil's *Aeneid* and Livy's *History*, or from Lucretius, Ovid,

and Cicero), but attention is always given to the historical and literary context of the authors read. While the primary focus is on reading Latin texts, some readings from Latin literature in translation are also assigned.

Prerequisite: **Latin 203** or three to four years of high school Latin.

[205c. Horace and Catullus.]

One of the following advanced Latin courses will be offered each semester:

301c. The Historians. Spring 1993. Ms. BOYD.

Focuses on the works of Livy or Tacitus. This course may be repeated for credit with the contents changed.

[302c. Ovid: *The Metamorphoses*.]

303c. Elegiac Poetry. Fall 1992. Ms. BOYD.

304c. Cicero and Roman Oratory. Spring 1994. Ms. BOYD.

305c. Virgil: *The Aeneid*. Fall 1993. Ms. BOYD.

[306c. The Roman Novel.]

[307c. Satire.]

[308c. Roman Comedy.]

[391c, 392c. Special Topics.]

Independent Study in Greek, Latin, Archaeology, and Classics

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study and Honors. THE DEPARTMENT.

Computer Science

Professor

Allen B. Tucker, Jr.**, *Chair*

Assistant Professors

David K. Garnick

Lance A. Ramshaw

Computer science is the study of algorithmic problem solving, computers, their potential, and their limits. At its center is the study of algorithms and data structures, including their formal properties, their implementations on real and abstract machines, their programming languages, and their applications in other disciplines and society at large. Computer science is a scientific discipline, in the sense that many of its courses are accompanied by experimental laboratory activities. Students use the laboratories not only to develop programs but also to test hypotheses about the properties of algorithms, data structures, and computers. Computer science is also a mathematical discipline, borrowing significant methodology and notation from mathematics.

The computer science curriculum is designed to introduce students to the discipline at various levels, and to explore its interdisciplinary ties in the sciences and humanities. Students normally begin by taking an introductory

computer science course (**101**) or first-year seminar (**10**). **Computer Science 101** provides a broad introduction to the discipline, and is open to all students whether or not they plan to major in computer science.

Students can explore the discipline in greater depth by majoring or minoring in computer science or choosing an interdisciplinary major in computer science and mathematics. These options provide a foundation for graduate study in computer science or a related field, as well as a wide range of computer-related professional opportunities.

Requirements for the Major in Computer Science

The major consists of nine computer science courses and two mathematics courses (**Mathematics 171** and **228**), for a total of eleven courses. The computer science courses in the major are the two introductory courses (**Computer Science 101** and **102**), four intermediate “core” courses (**Computer Science 220**, **231**, **250**, and **289**), and three elective courses (i.e., any computer science courses numbered 300 or above). Depending on individual needs, **Computer Science 290** or **400** (Independent Study) may be used to fulfill one or two of these elective requirements.

Requirements for the Minor in Computer Science

The minor consists of five courses, **Computer Science 101**, **102**, **220**, **231**, and **Mathematics 228**.

Interdisciplinary Major

The department participates in an interdisciplinary major program in computer science and mathematics. See page 124.

Student-designed Major

Students who are interested in a student-designed major that combines computer science with another discipline are encouraged to discuss their ideas with the department.

Independent Study, Honors, and Student/Faculty Projects

Advanced students are encouraged to consider taking an independent study course (**Computer Science 290** or **400**), which is often done in collaboration with an ongoing faculty research project. Independent study projects in disciplines that overlap with computer science are also encouraged.

[10a. Computers, Society, and Thought.]

101a. Introduction to Computer Science I. Every semester.

THE DEPARTMENT.

Emphasis on logic, problem specification and algorithm design, disciplined style and documentation, recursion, procedural abstraction, computer organization, and contemporary social issues in computing. A procedural programming language (Pascal) and an experimental laboratory environment are used to reinforce principles introduced in the lectures. A survey

of the major subject areas of computer science provides a foundation for further study.

102a. Introduction to Computer Science II. Spring 1993. MR. RAMSHAW.

An introduction to principles of data abstraction, complexity of algorithms, and verification of algorithms, which are central subjects in the field of computer science. Particular data types include lists, stacks, queues, strings, binary trees, and files. Linked lists, arrays, and other implementation strategies are evaluated. Laboratory experiments complement the lectures, and team projects are assigned.

Prerequisite: **Computer Science 101.**

220a. Computer Organization. Fall 1992. MR. TUCKER.

Computer systems are organized as multiple layers. Each layer provides a more sophisticated abstraction than the layer upon which it is built. This course examines system design at the digital logic, microprogramming, and assembly language layers of computer organization. Laboratory work familiarizes students with a particular machine through assembly-language programming.

Prerequisite: **Computer Science 101.**

231a. Algorithms. Every fall. MR. GARNICK.

The study of algorithms concerns programming for computational expediency. The course covers practical algorithms as well as theoretical issues in the design and analysis of algorithms. Topics include trees, graphs, sorting, dynamic programming, NP-completeness, and parallel algorithms. (Same as **Mathematics 231.**)

Prerequisites: **Computer Science 102** and **Mathematics 228**, or consent of the instructor.

250a. Principles of Programming Languages. Every spring. MR. RAMSHAW.

A comparative study of programming languages and paradigms, with special attention to object-oriented languages (Eiffel), functional programming languages (Lisp), and parallelism. Principles of programming-language design, including syntax, semantics, and compiling.

Prerequisite: **Computer Science 102.**

289a. Theory of Computation. Every fall. MR. TUCKER.

The theoretical principles that underlie formal languages, automata, computability, and complexity. Topics include regular and context-free languages, finite and pushdown automata, Turing machines, Church's thesis, Gödel numbering, and unsolvability. (Same as **Mathematics 289.**)

Prerequisite: **Mathematics 228** or consent of the instructor.

290a. Intermediate Independent Study. THE DEPARTMENT.

[300a. Topics.]

[310a. Operating Systems.]

330a. Applied Algorithms. Spring 1993. MR. GARNICK.

Focuses on seminumerical algorithms, with an emphasis on their implementations. Topics include arithmetic operations, random numbers, cryptography, discrete event simulation, and graph algorithms.

Prerequisites: **Computer Science 231**, or **102** with consent of the instructor.

[335a. Parallel Computing.]**[360a. Compiler Construction.]****[365a. Formal Methods and Software Systems Seminar.]****[370a. Artificial Intelligence.]****375a. Natural Language Processing.** Fall 1992. MR. RAMSHAW.

Explores the design of computer systems that understand, generate, or translate natural language texts. Covers syntactic grammar for representing sentence structure, semantic systems for representing word and sentence meaning, and pragmatic models of discourse structure for interpreting sentences in context.

Prerequisites: **Computer Science 250**, or **102** with consent of the instructor.

400a. Advanced Independent Study and Honors. THE DEPARTMENT.

Economics

Professors

A. Myrick Freeman
David J. Vail

Associate Professors

Rachel Connelly
Gregory P. DeCoster
John M. Fitzgerald
Jonathan P. Goldstein
C. Michael Jones, *Chair*

Assistant Professors

Deborah S. DeGraff
Louis D. Johnston
Andreas Ortmann

The major in economics is designed for students who wish to obtain a systematic introduction to the basic theoretical and empirical techniques of economics. It provides an opportunity to study economics as a social science with a core of theory, to study the process of drawing inferences from bodies of data and testing hypotheses against observation, and to study the application of economic theory to particular social problems. Such problems include Third World economic development, the functioning of economic institutions (e.g., corporations, government agencies, labor unions), and current policy issues (e.g., the federal budget, poverty, the environment, deregulation). The major is a useful preparation for graduate study in economics, law, business, or public administration.

Requirements for the Major in Economics

The major consists of **Economics 101** and **102**, three core courses (**Economics 255**, **256**, and **257**), two advanced topics courses numbered in the

300s, and two additional courses in economics numbered 200 or above. **Economics 101** is a prerequisite for **Economics 102**, and both are prerequisites for most other economics courses. Prospective majors are encouraged to take at least one core course by the end of the sophomore year, and all three core courses should normally be completed by the end of the junior year. Advanced topics courses normally have some combination of **Economics 255, 256, and 257** as prerequisites. Qualified students may undertake self-designed, interdisciplinary major programs or joint majors between economics and related fields of social analysis.

Students are strongly encouraged to complete **Mathematics 161**, or its equivalent, prior to the core courses.

Interdisciplinary Major

The department participates in an interdisciplinary major in mathematics and economics. See page 125.

Requirements for the Minor in Economics

The minor consists of **Economics 101 and 102; 255 or 256**; and any two additional courses numbered 200 or above.

101b. Principles of Microeconomics. Every semester. THE DEPARTMENT.

An introduction to economic analysis and institutions, with special emphasis on the allocation of resources through markets. The theory of demand, supply, cost, and market structure is developed and then applied to problems in antitrust policy, environmental quality, energy, education, health, the role of the corporation in society, income distribution, and poverty. Students desiring a comprehensive introduction to economic reasoning should take both **Economics 101 and 102**.

102b. Principles of Macroeconomics. Every semester. THE DEPARTMENT.

An introduction to economic analysis and institutions, with special emphasis on determinants of the level of national income, prices, and employment. Current problems of inflation and unemployment are explored with the aid of such analysis, and alternative views of the effectiveness of fiscal, monetary, and other governmental policies are analyzed. Attention is given to the sources and consequences of economic growth and to the nature and significance of international linkages through goods and capital markets.

Prerequisite: **Economics 101**.

207b. International Economics. Fall 1992. MR. JONES.

An analysis of the factors influencing the direction and composition of trade flows among nations, balance of payments equilibrium and adjustment mechanisms, and the international monetary system. Basic elements of international economic theory are applied to current issues such as tariff policy, capital flows and international investment, reform of the international monetary system, and the international competitiveness of the American economy.

Prerequisites: **Economics 101 and 102**.

208b. American Economic History and Development. Spring 1993.

MR. JOHNSTON.

A survey of trends in the U.S. economy from colonial times to the present. Emphasis is placed on factors explaining economic growth and on the distinction between growth and welfare. Business cycles, labor and capital markets, transportation, and the importance of the international economy for U.S. development are discussed.

Prerequisites: **Economics 101** and **102**, or consent of the instructor.

209b. Financial Markets. Fall 1992. MR. DECOSTER.

Introduction to the domestic financial system. Topics include the functions, structure, and operation of debt and equity markets; interest rate determination; portfolio theory and the capital asset pricing model; the efficient markets hypothesis; the structure and functions of the financial services industry; bank management; and the nature and effects of financial regulation.

Prerequisites: **Economics 101** and **102**.

210b. Economics of the Public Sector. Fall 1993 or Spring 1994.

MR. FITZGERALD.

The economic role of government. Deals with theoretical and applied analysis of government expenditures and taxes in meeting such social goals as allocative efficiency and income redistribution. Issues on the current political agenda are given special attention.

Prerequisites: **Economics 101** and **102**.

[212b. Labor and Human Resource Economics.]**[213b. History of Economic Thought.]****214b. Comparative Political Economy.** Spring 1993. MR. VAIL.

An analytic and historical framework for categorizing and comparing modes of production is developed and criteria for evaluating their economic performance are set out. The core of the course is a set of case studies including variants of advanced industrial capitalism (e.g., Japan and Sweden), socialism (China), and transitional post-Communist societies (Eastern Europe and the former Soviet Union).

216b. Industrial Organization. Fall 1993 or Spring 1994. MR. ORTMANN.

A study of the organization of firms, their strategic interactions, and the role of information. Introduces basic game-theoretic concepts, with which most problems of industrial organization can be solved.

Prerequisite: **Economics 101** or consent of the instructor.

217b. The Economics of Population. Fall 1993 or Spring 1994.

MS. DEGRAFF.

A study of the interaction of economic variables and population processes, especially fertility, mortality, and migration. The first half of the course

focuses on economic determinants of population; the second half, on the consequences of population growth for the economy.

Prerequisite: **Economics 101.**

218b. Economics of Resources and Environmental Quality.

Spring 1994. MR. FREEMAN.

The economic dimensions of environmental quality and resource management problems faced by the United States and the world. The relationships among population, production, and pollution; the role of market failure in explaining the existence of pollution; evaluation of alternative strategies for pollution control and environmental management; the adequacy of natural resource stocks to meet the future demands of the United States and the world.

Prerequisite: **Economics 101.**

[219b,d. Underdevelopment and Strategies for Development in Poor Countries.]

221b. Marxian Political Economy. Spring 1993. MR. GOLDSTEIN.

An introduction to the philosophical and methodological foundations of Marxian theory and the Marxian analysis of capitalistic economic development. After a brief introduction to the Marxian method, the basic analytical concepts of Marx's economic theory are developed from a reading of volume 1 of *Capital*. Subsequently, the Marxian framework is applied to analyze the modern capitalist economy, with emphasis on the secular and cyclical instability of the economy and appropriate policy prescriptions.

Prerequisites: **Economics 101 and 102.**

[222b,d. International Trade and Economic Development.]

[223b. The International Economy since 1850.]

229b. Germany in 1992. Fall 1992. MR. ORTMANN.

Recent developments in Germany as a consequence of unification and completion of internal European market. Although the course emphasizes economic developments and uses tools from industrial organization and international economics, it includes a historical survey and covers sociological, cultural, and political aspects of the transition.

Prerequisites: **Economics 101 and 102**, or consent of the instructor.

255b. Microeconomics. Fall 1992 and Spring 1993. MR. JONES AND MR. FITZGERALD.

An intermediate-level study of contemporary microeconomic theory. Analysis of the theory of resource allocation and distribution, with major emphasis on systems of markets and prices as a social mechanism for making resource allocation decisions. Topics include the theory of individual choice and demand, the theory of the firm, market equilibrium under competition and monopoly, general equilibrium theory, and welfare economics.

Prerequisites: **Economics 101 and 102.** Enrollment limited to 40 students. Elementary calculus will be used.

256b. Macroeconomics. Fall 1992 and Spring 1993. MR. DECOSTER AND MR. JOHNSTON.

An intermediate-level study of contemporary national income, employment, and inflation theory. Consumption, investment, government receipts, government expenditures, money, and interest rates are examined for their determinants, interrelationships, and role in determining the level of aggregate economic activity. Policy implications are drawn from the analysis.

Prerequisites: **Economics 101 and 102.** Enrollment limited to 40 students. Elementary calculus will be used.

257b. Economic Statistics. Fall 1992 and Spring 1993. MS. DEGRAFF AND MR. GOLDSTEIN.

An introduction to the data and statistical methods used in economics. A review of the systems that generate economic data and the accuracy of such data is followed by an examination of the statistical methods used in testing the hypotheses of economic theory, both micro- and macro-. Probability, random variables and their distributions, methods of estimating parameters, hypothesis testing, regression, and correlation are covered. The application of multiple regression to economic problems is stressed.

Prerequisites: **Economics 101 and 102.** Enrollment limited to 40 students.

Courses numbered above 300 are advanced courses in economic analysis intended primarily for majors. Enrollment in these courses is limited to 18 students in each unless stated otherwise. Elementary calculus will be used in all 300-level courses.

301b. The Economics of the Family. Fall 1993 or Spring 1994.

MS. CONNELLY.

Microeconomic analysis of the family, its roles, and its related institutions. Topics include marriage, fertility, labor supply, human capital formation, savings, consumption, bequests, and the family as an economic organization.

Prerequisites: **Economics 255 and 257,** or consent of the instructor.

[**302b. Business Cycles.**]

303b. Models of Economic Growth. Spring 1993. MR. JOHNSTON.

A survey of growth theory and its applications. Topics include qualitative and quantitative analyses of economic growth, both within and across nations and regions, and the application of economic models to specific time periods. Models to be studied include Malthusian models; the staples thesis; Harrod-Domar models; Rostow's "take-off" hypothesis and the role of leading sectors; neoclassical growth models; and endogenous growth models. Students develop their skills through a series of quantitative exercises, short essays, and a research paper on a topic of their choice.

Prerequisites: **Economics 255 and 256,** or consent of the instructor.

305b. Mathematics for Modern Economics. Spring 1993. MR. ORTMANN.

An advanced mathematical treatment of topics in microeconomic theory. The course covers ground similar to that of **Economics 255** but does so at a more technical level. Topics include a review of constrained optimization, the theory of consumer choice and demand, choice under uncertainty, dynamic choice, the neoclassical firm, moral hazard and incentives, adverse selection and market signaling, revelation principle and mechanism design, and theories of the firm.

Prerequisites: **Economics 255** and **Mathematics 161**, or consent of the instructor.

308b. Advanced International Trade. Spring 1993. MR. JONES.

The study of international trade in goods and capital. Theoretical models are developed to explain the pattern of trade and the gains from trade in competitive and imperfectly competitive world markets. This theory is then applied to issues in commercial policy, such as free trade versus protection, regional integration, the GATT and trade liberalization, foreign direct investment, LDC debt, and the changing comparative advantage of the United States.

Prerequisite: **Economics 255** or consent of the instructor.

309b. Monetary Economics and Finance. Fall 1992. MR. DECOSTER.

Advanced study of monetary and financial economics. Topics include portfolio theory and asset pricing models; financial market volatility and the efficient markets hypothesis; options and futures; mergers and acquisitions; monetary and financial theories of the business cycle; and issues in the conduct of monetary policy.

Prerequisites: **Economics 255** and **256** and **Mathematics 161**, or consent of the instructor.

310b. Advanced Public Economics. Fall 1992. MR. FITZGERALD.

A survey of theoretical and empirical evaluations of government activities, considering both efficiency and equity aspects. Topics include public choice, income redistribution, benefit-cost analysis, analysis of selected government expenditure programs (including social security), incidence and behavioral effects of taxation, and tax reform. Current public policy issues are emphasized.

Prerequisites: **Economics 255** and **257**, or consent of the instructor. Not open to those who have taken **Economics 210**.

[312b. Advanced Analysis of Labor Market Policies.]**316b. Econometrics.** Spring 1993. MR. GOLDSTEIN.

A study of the mathematical formulation of economic models and the statistical methods of testing them. A detailed examination of the general linear regression model, its assumptions, and its extensions. Applications to

both micro- and macro-economics are considered. Though most of the course deals with single-equation models, an introduction to the estimation of systems of equations is included. An empirical research paper is required.

Prerequisites: **Economics 257** or **Mathematics 265**, and **Mathematics 161**, or consent of the instructor. Enrollment limited to 25 students.

318b. Environmental and Resource Economics. Fall 1993. MR. FREEMAN.

Analysis of externalities and market failure; models of optimum control of pollution and efficient management of renewable and nonrenewable natural resources such as fisheries, forests, and minerals; benefit-cost analysis, risk-benefit assessment, and the techniques for measuring benefits and costs of policies.

Prerequisites: **Economics 255** and **257**. Not open to those who have taken **Economics 218**.

319b. Microeconomic Issues in Development. Fall 1992. MS. DEGRAFF.

Theoretical and empirical analysis of selected microeconomic issues within the context of developing countries. The course develops a dual focus on modeling household decisions and on the effects of government policy and intervention. Topics include household labor allocation; agriculture production, land use, and land tenure systems; investment in education and human resource development; income inequality; and population dynamics.

Prerequisites: **Economics 255** and **257**.

320b. Economics, Technology, and Progress. Fall 1992. MR. VAIL.

An investigation of economic and other forces influencing the pace and direction of technical change, as well as the implications of new technology for human well-being and ecological sustainability. Theoretical viewpoints, from Adam Smith to the neoclassical "induced innovation" school are analyzed, with emphasis on socioeconomic interpretations. Empirical cases include the Industrial Revolution, agricultural mechanization, biotechnology, and robotization. Policy issues range from Japanese research strategy to Third World technology transfer.

Prerequisites: **Economics 255** and **257**.

[329b. Open-Economy Macroeconomics.]

[355b. Topics in Advanced Microeconomic Theory: The Theory and Practice of Games and Decisions.]

400b. Independent Study and Honors. THE DEPARTMENT.

Education

Assistant Professor

T. Penny Martin, *Chair*

Director of Programs in Teaching

and Coordinator of Voluntary Programs

Ann S. Pierson

Visiting Instructor

George S. Isaacson

Associate in Education

James A. Irish

Bowdoin College does not offer a major in education.

Requirements for the Minor in Education

The minor in education consists of four courses.

Requirements for Certification to Teach in Public Secondary Schools

Because teaching in the public schools requires some form of licensure, the education department provides a sequence of courses leading to certification for secondary school teaching. This sequence includes the following:

1. A major in the discipline the student intends to teach, such as history, Spanish, biology, mathematics, or English. Public schools rarely offer more than one course in subjects such as sociology, philosophy, anthropology, art history, religion, or economics, so students with interests in those and similar fields should meet with Ms. Pierson as soon as possible to develop a program that will include those interests within a teaching field. While students' programs of study at Bowdoin need not be seriously restricted by plans to teach, majors and minors should be chosen with teaching possibilities in mind.
2. Five courses offered by the Department of Education: one 100-level course; one 200-level course; and **Education 301, 302, and 303**.
3. Two courses in the Department of Psychology, including a course in human development or learning theory.
4. Volunteer experience in a school or with youth groups.

Because education is not a major at Bowdoin, students interested in teaching as a career must plan the completion of course work for certification carefully.

Requirements for Teaching in Private Schools

State certification is not usually a requirement for teaching in independent schools. Thus, there is no common specification of what an undergraduate program for future private school teachers should be. In addition to a strong major in a secondary-school teaching field, however, it is recommended that prospective teachers follow a sequence of courses similar to the one leading to public school certification.

101b. Education in the Twentieth Century. Fall 1992. Ms. MARTIN.

Examines the past four decades of schooling in the United States, beginning with the *Brown* school desegregation decision in 1954. Topics include the purpose of schooling and what should be taught, the expanding role of the federal government in education, the rise of new populations and

new educational institutions, awareness of students' rights, issues of gender, and the reform movements of the 1980s. The role of schools and colleges in society's pursuit of equality and excellence forms the backdrop of this study.

102b. History of American Education. Every other year. Fall 1993.

Ms. MARTIN.

A study of the evolution of American educational ideas and institutions through the mid-twentieth century. Enduring themes that have shaped American education, such as the purpose of schooling, the nature of the curriculum, and the training and role of the teacher, are traced through the works of such figures as Horace Mann, Mary Lyon, W. E. B. DuBois, and John Dewey.

[105b. Topics in Education.]

201b. Schools and Communities. Every other year. Spring 1994.

Ms. MARTIN.

A study of the relationships between schools, parents, and their communities. Through field work in local communities, students observe how large issues, such as the purpose of schooling, the influence of federal and state governments, and the role of parents, work themselves out on the local level.

Prerequisite: **Education 101** or **102**, or consent of the instructor.

202b. Education and Biography. Spring 1993. Ms. MARTIN.

An examination of issues in American education through biography, autobiography, and autobiographical fiction. The effects of class, race, and sex on teaching, learning, and educational institutions are seen from the viewpoint of the individual, one infrequently represented in the professional literature. Authors include Franklin, Larcom, Henry Adams, Cather, McPhee, Sarton, Angelou, and Lightfoot.

250b. Law and Education. Fall 1992. MR. ISAACSON.

A study of the intersection of two fundamental American social institutions: the judiciary and the education system. Examines the influence of the courts on the operation and objectives of schools. Issues to be discussed include free speech, student discipline, sex discrimination, race relations, religious objections to curriculum and compulsory education, and teachers' rights. Statutory developments in such areas as special education, bilingual instruction, and school financing are also examined.

301b. Teaching. Fall 1992. Ms. MARTIN

A study of what takes place in classrooms: the methods and purposes of teachers, the response of students, and the organizational context. Readings and discussions help inform students' direct observations and written accounts of local classrooms. Peer teaching is an integral part of the course experience.

Prerequisites: Senior standing, one Bowdoin education course, one psychology course, and consent of the instructor.

302b. Student Teaching. Spring 1993. MR. IRISH.

Because this final course in the student teaching sequence demands a considerable commitment of time and serious responsibilities in a local secondary school classroom, enrollment in the course requires the recommendation of the instructor of **Education 301**. Recommendation is based on performance in **Education 301**, the student's cumulative and overall academic performance at Bowdoin, and the student's good standing in the Bowdoin community. Required of all students who seek secondary public school certification, the course is also open to those with other serious interests in teaching. In addition to daily work in the local school, weekly on-campus class and conference meetings and writing projects are required. Grades are awarded on a Credit/Fail basis only. **Education 303 must be taken concurrently with this course.**

Prerequisites: Senior standing, three Bowdoin education courses, including **Education 301**; two psychology courses, including one in human development or learning theory; volunteer experience in the schools; and consent of the instructor.

303b. Curriculum. Spring 1993. MR. IRISH.

A study of the knowledge taught in schools; its selection and the rationale by which one course of study rather than another is included; its adaptation for different categories of students; its cognitive and social purposes; the organization and integration of its various components.

Prerequisite: **Education 301** or consent of the instructor.

290b. Intermediate Independent Study.**400b. Advanced Independent Study.**

English

Professors

Franklin G. Burroughs, Jr.

Joanne F. Diehl, *Chair*

Barbara J. Kaster **

James D. Redwine, Jr.

William C. Watterson

Associate Professors

Celeste Goodridge

Joseph D. Litvak

Marilyn Reizbaum**

Assistant Professors

David Collings

Ann L. Kibbie

Visiting Assistant Professor

Rajani Sudan

Lecturer

David R. Anderson

Requirements for the Major in English and American Literature

The major requires a minimum of ten courses, three of which must be chosen

from offerings in English literature before 1800 (**English 200, 201, 202, 210, 211, 220, 221, 222, 223, 230, 231, and 250**). Only one of these three courses may be a Shakespeare course. Seven additional units may be selected from the foregoing and/or **English 10–29** (first-year seminars, not more than two); **61–63** (Creative Writing, only one); **101–103; 240–281; 300–399; 291–292** (independent study); and **401–402** (advanced independent study). **Regular courses (English 50–59) and independent studies (English 296–297; English 406–407) in film and communication do not count toward the major.** Students who intend to major in English should take a minimum of three courses in the department before declaring the major. Credit toward the major for advanced literature courses in another language, provided that the works are read in that language, and other exceptions to the requirements, must be arranged with the chair.

Majors who are candidates for honors must take the honors seminar in the fall of their senior year, write an honors essay, and take an oral examination in the spring.

Requirements for the Minor in English and American Literature

At least five of the above courses, excluding all courses in film and communication.

English 10–29

First-Year Seminars in English Composition and Literature

These courses are open to first-year students. The first-year English seminars are numbered 10–19 in the fall; 20–29 in the spring. Usually there are not enough openings in the fall for all first-year students who want an English seminar. First-year students who cannot get into a seminar in the fall are given priority in the spring. The main purpose of the first-year seminars (no matter what the topic or reading list) is to give first-year students extensive practice in reading and writing analytically. Each seminar is normally limited to 16 students and includes discussion, outside reading, frequent papers, and individual conferences on writing problems.

10c. Secular Pilgrims. Fall 1992. MR. BURROUGHS.

(See page 95 for a full description.)

11c. Artifice. Fall 1992. MR. COLLINGS.

(See page 95 for a full description.)

12c. American Literature of the 1920s. Fall 1992. MS. GOODRIDGE.

(See page 95 for a full description.)

13c. Comedy. Fall 1992. MR. LITVAK.

(See page 95 for a full description.)

14c. Satire. Fall 1992. MR. REDWINE.

(See page 95 for a full description.)

15c. Representation and Gender. Fall 1992. Ms. SUDAN.

(See page 95 for a full description.)

20c. Theme and Technique in Twentieth-Century Poetry. Spring 1993.

MR. BURROUGHS.

(See page 96 for a full description.)

21c. Literature and Medicine. Spring 1993. Ms. DIEHL.

(See page 96 for a full description.)

22c. American Poetry. Spring 1993. Ms. GOODRIDGE.

(See page 96 for a full description.)

23c. The Comedy of Manners. Spring 1993. Ms. KIBBIE.

(See page 96 for a full description.)

24c. Drama. Spring 1993. MR. REDWINE.

(See page 96 for a full description.)

25c. The Politics of Sexuality. Spring 1993. Ms. SUDAN.

(See page 96 for a full description.)

English 101 and 102

Survey Course in English Literature

A reading course, with examinations, designed to familiarize students with the main currents of English literature, from Anglo-Saxon times to the twentieth century. Limited to 75 students each semester, with preference given in **English 101** to sophomores, juniors, and AP first-year students (in that order) and in **English 102** to students completing **English 101** and to first-year students completing a first-year seminar.

101c. Every fall. Fall 1992. Ms. KIBBIE.

Provides a broad introduction, from the beginnings to the end of the eighteenth century. Individual works are studied in the context of major stylistic, thematic, and historical developments. Special attention is given to genre and prosody. Major writers include Chaucer, Shakespeare, Donne, Milton, and Pope.

102c. Every spring. Spring 1993. Ms. SUDAN.

Emphasizes major stylistic, thematic, and historical developments, from the Romantic movement at the end of the eighteenth century, through the Victorian age, and into modern British poetry. Major writers may include Blake, Wordsworth, Coleridge, Shelley, Byron, Keats, Brontë, Tennyson, Arnold, Dickens, Rossetti, Browning(s), Yeats, Eliot, and Woolf.

[103c. The Bible in Literary Focus.]

(Same as **Religion 204.**)

Courses in Film, Communication, and Writing

[50c. Public Speaking.]

51c. History of Film. Every fall. Ms. KASTER.

Examines the development and growth of film from its pre-filmic origins to the present. Early work of Lumiere, Melies, and Porter is studied, followed by works of Griffith, Eisenstein, Renoir, and Welles. The films of a variety of *auteur* directors, important film genres, and national film movements are studied, and may include *auteurs* Fellini, Ford, Truffaut, Bergman, Kurosawa, and Hitchcock; the Western, film noir, and musical genres; and Italian neorealism, the French New Wave, the New German Cinema, the Australian New Wave, the Cinema Novo of Latin America, and the New Japanese Film movements.

[52c. Electronic Film Production.]**53c,d. The New Latin American Film.** Fall 1992. Ms. KASTER.

An introduction to the major Latin American films from the late 1950s to the present. Emphasis on the directors who sought to create a new vision of Latin America by exploring previously ignored "national realities": marginal urban populations, culturally and economically isolated groups, indigenous communities, repressive dictatorships. Special attention is given to the "1960 Generation" in Argentina and the "Cinema Novo" movement in Brazil. Films include those by Argentines Nilsson, Birri, Solanas, Puenzo, and Bemberg; and Brazilians Dos Santos, Rocha, Babenco, Diegues, and Hirzman. Enrollment limited to 20 students.

60c. English Composition. Fall 1992. Mr. WATTERSON.

Practice in expository and critical writing, with special attention to the preparation, writing, and analysis of student essays. Focuses on different modes of composition through an examination of essay writing by several authors.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

61c. Creative Writing I. Spring 1994. Mr. WATTERSON.

Course format is part workshop, part tutorial. Concentrates exclusively on the writing of poetry.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

63c. Creative Writing II: Narrative. Spring 1993. Mr. BURROUGHS.

A workshop for writers interested in fictional and/or nonfictional prose narrative.

Prerequisite: Consent of the instructor. Participants to be selected on the basis of an 8–15-page writing sample, to be submitted by December 1, 1992. Enrollment limited to 15 students.

296c, 297c. Intermediate Independent Study in Film and Communication. Ms. KASTER.

406c, 407c. Advanced Independent Study in Film and Communication. MS. KASTER.

Advanced Courses in English and American Literature

[200c. Old English.]

201c. Chaucer. Every other year. Spring 1994. MR. BURROUGHS.
Emphasis on *The Canterbury Tales*.

202c. Topics in Middle English Literature. Fall 1992. **Chaucer and the Tradition of Epic.** MR. BURROUGHS.

Focuses on *The Aeneid*, *The Divine Comedy*, and the earlier work of Chaucer, especially *Troilus and Criseyde*.

210c. Shakespeare's Comedies and Romances. Every fall. Fall 1992. MR. WATTERSON.

Examines *A Midsummer Night's Dream*, *The Merchant of Venice*, *Twelfth Night*, *As You Like It*, *The Winter's Tale*, *Cymbeline*, *Pericles*, and *The Tempest* in light of Renaissance genre theory.

211c. Shakespeare's Tragedies and Roman Plays. Spring 1993. MR. WATTERSON.

Examines *Hamlet*, *Othello*, *Macbeth*, *King Lear*, *Julius Caesar*, *Antony and Cleopatra*, and *Coriolanus* in light of recent critical thought. Special attention is given to psychoanalysis, new historicism, and genre theory.

220c. English Literature of the Early Renaissance. Every other fall. Fall 1993. MR. REDWINE.

A critical study of the literature of the sixteenth century, with emphasis on Elizabethan nondramatic poetry.

221c. English Literature of the Late Renaissance. Every other spring. Spring 1994. MR. REDWINE.

A critical study of the literature of the seventeenth century exclusive of Milton, with emphasis on the poetry of Donne, Jonson, and their followers.

222c. Milton. Every other year. Fall 1992. MR. REDWINE.

A critical study of his chief writings in poetry and prose.

223c. Elizabethan and Stuart Drama. Every other year. Spring 1993. MR. REDWINE.

A study of some comedies, tragedies, tragicomedies, and history plays by Shakespeare's predecessors, contemporaries, and followers in England during the sixteenth and seventeenth centuries—plays by Lily, Kyd, Marlowe, Dekker, Jonson, Tourneur, Webster, Beaumont, Fletcher, Massinger, and Ford, among others.

230c. The Politics of Genre in Restoration and Early-Eighteenth-Century Literature. Every other year. Fall 1993. MS. KIBBIE.

This survey of the drama, poetry, and prose of Restoration and early-

eighteenth-century England focuses on how writers turned to satire as a weapon in the social and political battles of the time, and how this is related to their project of destroying, redefining, or purifying conventional genres (such as the heroic tragedy or the pastoral). Considers the emergence of a literary marketplace and its effect upon ideas of authorship. Writers include Dryden, Gay, Pope, Swift, Richardson, and Fielding.

231c. Sublimity and Sentiment in the Eighteenth Century. Spring 1994. MS. KIBBIE.

Focuses on the development of two literary movements in eighteenth-century England: the Sublime and the Sentimental. The study of the Sublime movement, represented by the Graveyard Poets, Addison, Edmund Burke, Collins, and Smart, leads to a consideration of political as well as literary revolutions, while analysis of the Sentimental movement, represented by Steele, Lillo, Richardson, and Sterne, requires a discussion of gender and sexuality. Other readings include works of Johnson, Boswell, Hume, Gibbon, and Goldsmith.

240c. English Romanticism I. Every other year. Fall 1992. MR. COLLINGS.

Examines the first generation of English Romantics. Includes discussion of such authors as Burns, Blake, Wordsworth, Coleridge, and Lamb.

241c. English Romanticism II. Every other year. Spring 1993.

MR. COLLINGS.

Examines the second generation of English Romantics. Includes discussion of such authors as Byron, Shelley, Clare, Hazlitt, Keats, and De Quincey.

242c. Victorian Poetry and Prose. Spring 1993. MR. LITVAK.

Not a survey course, but an examination of a specific issue that traverses generic boundaries and opens up new ways of thinking about the Victorians. The topic for Spring 1993 is Class and Sex in Victorian Culture. Authors to be considered include Tennyson, the Brownings, Disraeli, Gaskell, Thackeray, and Wilde.

250c. The Rise of the Novel. Every other year. Spring 1993. MS. KIBBIE.

Traces the emergence of the novel in the eighteenth century as a distinct genre that absorbed earlier kinds of writing but also provided something new. Authors read include Bunyan, Behn, Defoe, Richardson, Fielding, Sterne, Smollett, and Burney. Enrollment limited to 40 students.

251c. The Romantic Novel. Every other year. Fall 1993. MR. COLLINGS.

Readings in novels of the Romantic period. Authors include Godwin, Radcliffe, Edgeworth, Austen, Mary Shelley, and Scott.

252c. The Victorian Novel. Every other spring. Spring 1994. MR. LITVAK.

Emphasizes the social and political significance of novels by Emily Brontë, Charlotte Brontë, Charles Dickens, Elizabeth Gaskell, Wilkie Collins, George Eliot, Anthony Trollope, Thomas Hardy, and George Gissing.

260c. Twentieth-Century British Poetry. Every other year. Fall 1992.
Ms. REIZBAUM.

Authors include Eliot, Auden, Yeats, Hugh MacDiarmid, Stevie Smith, Dylan Thomas, Seamus Heaney, and a further selection from contemporary Scottish and Irish poetry.

[261c. Twentieth-Century British Fiction.]

262c. Modern Drama. Every other year. Fall 1993. Ms. REIZBAUM.

Focuses on British and American dramas, including the works of Stoppard, Wilde, Nizetke Shange, Beckett, Albee, and Wasserstein, and some Continental playwriting (Brecht, Ibsen).

270c. American Literature to 1860. Every other year. Fall 1992.
Ms. DIEHL.

An overview of American literature from its beginnings to the American Renaissance. Examines the diverse cultural heritage that shapes the American literary tradition. Readings include a wide range of writers, both canonical and noncanonical, in an attempt to redefine the contributions of Native American, women, African-American, and Hispanic authors, within a rich and distinctive emergent American literary culture.

271c. American Literature 1860–1917. Every other year. Spring 1993.
Ms. GOODRIDGE.

Focuses on Melville and James as representative of this period.

[272c. American Fiction 1917–1945.]

[273c. American Fiction since 1945.]

274c. American Poetry in the Twentieth Century. Fall 1993.
Ms. GOODRIDGE.

Poets include Frost, Stevens, Williams, Moore, Bishop, Brooks, Lowell, Merrill, Rich, and Plath. Enrollment limited to 40 students.

275c,d. African-American Fiction by Women. Fall 1992. Ms. SUDAN.

Writers to be studied include Morrison, Walker, Naylor, Angelou, and Bell Hooks. (Same as *Afro-American Studies* 275.)

[276c,d. African-American Poetry.]

(Same as *Afro-American Studies* 276.)

[280c. Women Writers in English.]

281c. Narrative. Fall 1992. Mr. LITVAK.

The theory and practice of narrative, in literature (novels by Emily Brontë, Wilkie Collins, Bram Stoker, Fannie Hurst, Chester Himes, Gloria Naylor), in film (films by Alfred Hitchcock, Dorothy Arzner, Douglas Sirk, Francis Ford Coppola, Spike Lee), and in television (soap operas, situation comedies, music videos, newscasts). Frequent evening screenings of films in addition to regular class sessions.

300c. Literary Theory. Every other year. Fall 1993. MR. LITVAK.

An analysis of semiotic, deconstructive, psychoanalytic, feminist, Marxist, African-American, and gay and lesbian theories of literature.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

310c–350c. Studies in Literary Genres. Every year.

Lectures, discussions, and extensive readings in a major literary genre: e.g., the narrative poem, the lyric poem, fiction, comedy, tragedy, or the essay.

341c. Honors Seminar: Contemporary Literary Criticism. Fall 1992.

MS. DIEHL.

An overview of current developments in the field of literary analysis. Approaches to be examined include feminist theory, psychoanalytic criticism, and the new historicism. Considers the practical applications of contemporary theory for literary interpretation. (*All students who intend to take honors must enroll in this seminar.*)

Prerequisite: Enrollment in honors program or consent of the instructor. Enrollment limited to 15 students.

342c. American Poetry. Fall 1992. MS. GOODRIDGE.

Analysis of poetry and prose by Bishop, Merrill, Ashbery, Hearne, and Howard.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

343c. The Literature of Libertinism. Fall 1992. MS. KIBBIE.

The philosophy of Libertinism uses sexual license as a way to declare war on the laws, both written and unwritten, that seek to hold society together. This course surveys Libertine literature from the poetry of the Earl of Rochester to Laclos's *Dangerous Liaisons* with a number of dramatic works in between.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

344c. Modern Jewish-American Literature. Fall 1992. MS. REIZBAUM.

Examines a variety of works belonging to the category of Jewish-American literature. Explores the Jewish figure as cultural outsider, its analogue provided by the figure of woman, as well as the place of the Jewish woman, and humor as a response to oppression. The works are placed in the context of Jewish history, both ancient and recent, and of a Jewish literary tradition. Authors include Emma Lazarus, Henry Roth, Philip Roth, Grace Paley, Leslea Newman, Isaac Bashevis Singer.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

345c. Disaster. Spring 1993. MR. COLLINGS.

Examines one of the ways in which contemporary culture imagines its

condition. Ranges from accounts of the recent past (the Holocaust, the bombing of Hiroshima, the Vietnam experience) to fictions of the future (World War III, ecocatastrophe). Examines both “high” and “low” forms of disaster literature: from theoretical reflections on the end of philosophy or poetry to representations of catastrophe in science fiction and cinema. Authors may include Wiesel, Ibuse, Herr, Beckett, Blanchot, Derrida, Bloom, Baudrillard, Ballard, Gibson, Sterling, and Acker.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

346c. Feminist Literary Theory and Criticism. Spring 1993. Ms. DIEHL.

Examines the major theoretical issues addressed by contemporary feminist critics. Readings explore questions relating to methodology, canonicity, ethnicity, tradition, desire, and race. Authors include Jane Tompkins, Elaine Showalter, Sandra Gilbert, Susan Gubar, Hélène Cixous, Luce Irigaray, Barbara Christian, and Gayatri Spivak.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

347c. The Star System: Performance and Celebrity in Mass Culture. Spring 1993. MR. LITVAK.

What does the institution of stardom do in modern Western culture? What is the relationship between stardom and mere acting? The course addresses these questions by analyzing film performances by Bette Davis, Rock Hudson, Orson Welles, Lana Turner, Marlon Brando, Robert de Niro, Spike Lee, and Madonna. Examples are also drawn from television and popular music, and attention is given to the ways in which the star system extends into the realms of politics, business, and academia. Extensive readings in film theory and cultural theory, and frequent evening screenings of films in addition to regular class sessions.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

348c. “This/That England”: Shakespeare’s History Plays. Spring 1993. MR. WATTERSON.

Explores the relationship of *Richard III* and the second tetralogy (*RII*, the two parts of *HIV*, and *HV*) to the genre of English chronicle play that flourished in the 1580s and 1590s. Readings in primary sources (More, Hall, and Holinshed) are supplemented by readings of critics (Tillyard, Kelly, Siegel, Greenblatt, Goldberg, etc.) concerned with locating Shakespeare’s own orientation toward questions of history and historical meaning. Regular screenings of BBC productions are a vital component of the course.

Prerequisite: Consent of the instructor. Enrollment limited to 15 students.

349c. The Evolving Art: Poetry as Process among Modernist and Harlem Renaissance Poets. Spring 1993. MR. ANDERSON.

Through the influence of Darwin's theory of natural selection, many American poets in the early twentieth century began to understand personal and cultural experience as evolving processes. This course examines how the concept of adaptation influenced theme, formal organization, and ideas about reader response among selected modernist and Harlem Renaissance poets. Poets may include Moore, Frost, Williams, Brown, Cullen, and Hughes. Additional readings touch on evolutionary biology, Jamesian pragmatism, and theories of racial and cultural assimilation.

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study and Honors. THE DEPARTMENT.

Environmental Studies

Administered by the Committee on Environmental Studies

Professor

A. Myrick Freeman

Research Professor

John C. Rensenbrink

Associate Professor

Edward P. Laine, *Program Director*

Assistant Professor

Lawrence H. Simon

Lecturer

Edward S. Gilfillan

Adjunct Visiting Professor

Orlando E. Delogu (*first semester*)

Program Coordinator

Helen D. Koulouris

Requirements for the Coordinate Major in Environmental Studies (ES)

The major involves the completion of a departmental major and the following seven courses:

Required environmental studies courses

1. **ES 101, Introduction to Environmental Studies.**

2. Senior seminar: A culminating course of one semester is required of majors. Such courses are multidisciplinary, studying a topic from at least two or three areas of the curriculum. **ES 390, 391, 392, or 394** will meet this requirement.

3. **Five courses approved for environmental studies credit:** These courses are designated "Environmental Studies" or are cross-listed with environmental studies. The distribution of these five courses is as follows:

a. One course from each of the three curriculum areas: the sciences, social sciences, and arts and humanities.

b. Two elective courses: These courses may be chosen from environmental studies or the approved cross-listings. However, students are urged to

consider **ES 290** and **400**, intermediate and advanced independent studies, in consultation with the program.

Environmental Studies Semester in Ecuador

This program is a regular Bowdoin course offering that is held every other year during the spring semester. Courses are taught under the direction of Bowdoin faculty using the facilities of the Escuela Superior Politecnica del Litoral (ESPOL) in Guayaquil and include **ES 200**, Marine Ecology; **ES 115**, Introduction to Environmental Sciences; **ES 391**, Current Environmental Problems in Ecuador; **ES 290** or **ES 490**, Independent Study; and Spanish language instruction at the appropriate level. Preference is given to junior and senior students. For more information, contact the Environmental Studies Program.

101. Introduction to Environmental Studies. Every year. Fall 1992.

MR. LAINE.

An examination of the earth's major environmental systems and of the relationship between these systems and such fundamental issues as population growth, resource and energy quality and sufficiency, and environmental quality. Topics include the meaning and usefulness of scientific information and insights for such complex questions as quality of the atmosphere and climatic change, depletion of fresh water, loss of soil productivity, loss of genetic diversity, toxic contamination and waste disposal, and tropical deforestation.

Enrollment limited to 75 students, with preference given to first- and second-year students. Required for environmental studies majors beginning with the class of 1995.

115a. Introduction to Environmental Sciences. Every spring.

Spring 1993. MR. GILFILLAN. *To be offered in Ecuador.*

An interdisciplinary introduction to the environmental sciences. Course material includes surficial and environmental geology and marine and aquatic ecology. In addition to classroom work, there are weekly sessions of laboratory work or field work that focus on local environmental problems. (Same as **Geology 115**.)

Prerequisite: **ES 101** or consent of the instructor. Enrollment limited to 25 students; preference given to students intending to major in either geology or environmental studies.

200a. Marine Ecology. Spring 1993. MR. GILFILLAN. *To be offered in Ecuador.*

The relationships between organisms and their environment are considered in the context of animals and plants living in the sea. The concept of marine communities living in dynamic equilibrium with their physical-chemical environment is introduced, and the influence of human activities on the ecology of marine organisms is explored. (Same as **Biology 156**.)

Prerequisite: A college-level science course or consent of the instructor.

220b. Environmental Law. Fall 1992. MR. DELOGU.

An examination of how society responds to environmental problems, considering a range of alternative legal strategies. Concepts in remedies, administrative law, and constitutional law, as well as economics and the sciences, are used to understand these problems and probable solutions.

Prerequisite: Junior or senior standing.

236c. Environmental Analysis: Political Philosophy and Policy.

Spring 1994 and Spring 1995. MR. SIMON.

Examines aspects of the environmental crisis, with special emphasis on political issues. Topics include our relation to and responsibility for nature in light of the present crisis; the adequacy of the conceptual and political resources of our tradition to address the crisis; the interconnection of scientific, moral, political, and policy factors; and the philosophical critique of methodological approaches such as cost-benefit analysis. (Same as **Philosophy 236**.)

241b. Principles of Land-Use Planning. Spring 1994. THE DEPARTMENT.

Land—how it is used, who controls it, the tension between private and public rights to it—is central to today's environmental debate. Land-use planning is inevitably part of that debate. It is a bridge between the physical environment (the land) and the social, economic, and political forces affecting that environment. The course exposes students to the physical principles of land-use planning and the legal and socioeconomic principles that underlie it.

Prerequisite: Junior or senior standing. Preference given to environmental studies majors.

258c. Environmental Ethics. Fall 1992 and Fall 1993. MR. SIMON.

The central issue in environmental ethics concerns what things in nature have moral standing and how conflicts of interest among them are to be resolved. Specific topics to be covered include an introduction to ethical theory, anthropocentrism, the moral status of nonhuman sentient things, preservation of endangered species and the wilderness, the moral status of nonsentient living things, holism versus individualism, and the land ethic. (Same as **Philosophy 258**.)

Prerequisite: Sophomore standing.

390. Seminar in Environmental Studies: Political Renewal in the Late Twentieth Century—A Critical Assessment of the Contributions of Feminism, Multiculturalism, and Ecology. Fall 1992. MR. RENSENBRINK.

An interdisciplinary seminar for students with a focus in Asian studies, Afro-American studies, environmental studies, and/or women's studies. First discusses the concept of political renewal, with emphasis on the nature and feasibility of democracy under modern conditions. Then examines

concepts of feminism, multiculturalism, and ecology as they evolve in social movements of the late twentieth century. Three kinds of encounters, or struggles, are examined: the internal conceptual debate within each movement; the competition and cooperation among all three; and their encounters with the prevailing political system and culture. Readings include works of intellectuals and activists within each movement, several of whom will visit Bowdoin for discussions with students and the community. A final project attempts to put in critical perspective the relation between these movements and the possibilities for political renewal. (Same as **Afro-American Studies 390** and **Women's Studies 390**.)

Prerequisites: Two or more lower-level courses in one or more of the four interdisciplinary programs, or consent of the instructor. Enrollment limited to 15 students. Preference given to seniors.

391. Seminar in Environmental Studies: Merrymeeting Bay.

Spring 1993. MR. LAINE.

Exploration of the watershed of Merrymeeting Bay, with emphasis on the relationship between land use and surficial geology. A significant portion of the course is devoted to student projects.

Enrollment limited to 15 students. Preference given to junior and senior environmental studies majors.

392. Seminar in Environmental Studies: Advanced Topics in Environmental Philosophy. Spring 1993. MR. SIMON.

Topics may include conservation and our obligation to future generations; individualism, holism, and the construction of the moral community; normative aspects of policy formation; and philosophical problems concerning technology. (Same as **Philosophy 392**.)

Enrollment limited to 15 students. Preference given to senior philosophy majors and environmental studies majors.

393. Seminar in Environmental Studies: Oil-Spill Contingency Planning—How Do We Decide among Controversial Countermeasures?

Fall 1992. MR. GILFILLAN.

Enrollment limited to 15 students. Preference given to junior and senior environmental studies majors.

394. Seminar in Environmental Studies: Regulating Chemicals in the Environment. Fall 1992. MR. FREEMAN.

A study of the principles of risk assessment and risk management and their application to the regulation of environmental exposures to chemicals. Regulation of chemicals to protect human health and for other purposes involves trade-offs. Two major questions are posed: How does our government make these trade-offs today? How should these trade-offs be made in a society that desires to improve human welfare? Topics include the scientific basis for assessing health risks, benefit-cost and risk-benefit analysis, the present legal framework for regulation, and alternative approaches to regu-

lation. Case studies include lead in the environment, PCB's, dioxins, pesticides in food, and control of airborne toxic chemicals.

Prerequisites: Junior or senior standing and consent of the instructor. Enrollment limited to 15 students.

290. Intermediate Independent Study. THE PROGRAM.

400. Advanced Independent Study and Honors. THE PROGRAM.

CROSS LISTINGS

(For full course descriptions and prerequisites, see the appropriate department listings.)

Sciences

Biology 54a. Concepts in Ecology and Evolutionary Biology. Every other spring. Spring 1994. MR. WHEELWRIGHT.

Biology 115a. Ecology. Every fall. MR. WHEELWRIGHT.

Biology 163a. Biology of Marine Organisms. Every fall. Fall 1992. MS. YENTSCH.

Geology 256a. Environmental Geology. Fall 1993 and Fall 1994. MR. LAINE.

Geology 278a. Quaternary Environments. Spring 1993 and Spring 1995. MR. LEA.

Social Sciences

Anthropology 220b,d. Hunters and Gatherers. Spring 1994. MS. KAPLAN.

Anthropology 231b,d. Native Peoples and Cultures of Arctic America. Spring 1993. MR. BLITZ.

Economics 218b. Economics of Resources and Environmental Quality. Spring 1994. MR. FREEMAN.

***Sociology 214b. Science, Technology, and Society.** Spring 1994. MS. BELL.

Sociology 217b. Environmental Sociology. Fall 1992. MR. McLAUGHLIN.

***Sociology 251b. Sociology of Health and Illness.** Fall 1993. MS. BELL.

Humanities

***Art 190c. Architectural Design I.** Spring 1993. MR. GLASS.

Religion 253c. Religion, Women, and Nature. Fall 1993. MS. MAKARUSHKA.

*Courses marked with an asterisk will receive environmental studies credit with the approval of the instructor. It is expected that a substantial portion of the student's research efforts will focus on the environment.

First-Year Seminars

The purpose of the first-year seminar program is to introduce college-level disciplines and to contribute to students' understanding of the ways in which a specific discipline may relate to other areas in the humanities, social sciences, and sciences. A major emphasis of each seminar will be placed upon the improvement of students' skills—their ability to read texts effectively and to write prose that is carefully organized, concise, and firmly based upon evidence. Students who have particular difficulty with writing will be identified by the Deans' Office and will be advised to enter special tutorial classes.

Each year a number of departments offer first-year seminars. Enrollment in each is limited to 16 students. Sufficient seminars are offered to ensure that every first-year student will have the opportunity to participate during at least one semester of the first year. Registration for the seminars will take place before registration for other courses, to facilitate scheduling. A complete listing of first-year seminars being offered in the 1992–93 academic year follows. Also included are some of the seminars that will be offered in 1993–94.

Art 10c,d. Latin American Arts: Pre-Conquest, Colonial, and Modern. Fall 1992. MS. WEGNER.

Examines art of the native cultures of Mexico and Peru before European contact, the transformations produced by a blending of indigenous tradition and European imports during colonization, and the development of strong national and personal styles in the twentieth century. Cultures, objects, and artists to be studied include Inca, Aztec, Cuzco-circle artists, Mexican mission codices, Frida Kahlo, and Diego Rivera. No prior knowledge of history of art is required.

Art 11c,d. Art, Poetry, and Religion in China and Japan. Spring 1993. MR. OLDS.

Examines the art of East Asia in the context of Taoism, Buddhism, Zen Buddhism, Shinto, and the work of major Chinese and Japanese poets. No knowledge of Asian languages is required.

Art 12c. The Art of Portraiture. Spring 1993. MS. DOCHERTY.

Examines characteristic features of this art form through the study of specific examples from different times and places. Works of painting, sculpture, and photography are discussed in historical and cultural context, as are variations on the individual portrait such as self-portraiture, group portraiture, and portraits of actors in roles. Biographical writings and short fiction in which portraiture figures prominently complement the study of the visual arts.

Asian Studies 10c,d. Art, Poetry, and Religion in China and Japan. Spring 1993. MR. OLDS.

(Same as **Art 11.**)

Asian Studies 22c,d. Chinese Strategy. Spring 1994. MR. SMITH.

An investigation of traditional strategy, the philosophical and historical

contexts from which it arose, and its embodiment in novels from the imperial period. (Same as **History 22.**)

Biology 11a. Ancient Biology and Medicine. Fall 1992. MR. HOWLAND.

An introduction to life science as practiced from approximately the second millennium B.C. in Egypt and Mesopotamia, through the classical period, and extending to the Islamic and European Middle Ages.

Prerequisite: First-year standing.

Classics 13c. Slavery in the Ancient Mediterranean World. Fall 1992.

MR. SMITH.

Examines historical and archaeological evidence for slavery. Explores similarities in institutions of slavery, as well as the distinctive ways that slavery fits into the very different social, economic, and legal systems of Assyria, the Persian Empire, classical and Hellenistic Greece, and imperial Rome.

English 10c. Secular Pilgrims. Fall 1992. MR. BURROUGHS.

The theme of the pilgrimage as it evolves out of the Enlightenment and toward the present. Writers include Swift, Voltaire, Johnson, Fielding, and Conrad.

English 11c. Artifice. Fall 1992. MR. COLLINGS.

A discussion of various strategies for making life into art: wit, seduction, style, risk, challenge, and deception. Authors may include Shakespeare, Etherage, Laclos, De Quincey, Doyle, Wilde, Borges, Dick, Barthes, and Baudrillard.

English 12c. American Literature of the 1920s. Fall 1992. MS. GOODRIDGE.

A consideration of the historical forces and aesthetic concerns that shaped this decade. Also focuses on several writers from the Harlem Renaissance. Writers to be studied include Fitzgerald, Hemingway, Cather, Larsen, Toomer, and Faulkner.

English 13c. Comedy. Fall 1992. MR. LITVAK.

A study of the social and psychological functions of comedy. Examples range from literary high culture (Jane Austen, Oscar Wilde, Evelyn Waugh, Nathanael West) to Hollywood cinema (Frank Capra, Billy Wilder, Woody Allen, Robert Townsend) to television (*SCTV*, *The Simpsons*, *In Living Color*). Readings include theoretical texts by Sigmund Freud and others.

English 14c. Satire. Fall 1992. MR. REDWINE.

Examines different methods and objects of satire in works of Sir Thomas More, Shakespeare, Jonson, Voltaire, Swift, Butler, Twain, Huxley, and Orwell.

English 15c. Representation and Gender. Fall 1992. MS. SUDAN.

An investigation of the interaction of culture and ideology in the representation of "woman," using examples from literature, film, and advertising. Examines feminist responses (both old and new) to prevailing definitions of

women. Readings include Berger's *Ways of Seeing*, Coward's *Female Desires*, Morgan's *The Total Woman*, de Beauvoir's *The Second Sex*, Friedan's *The Feminine Mystique*, and a Harlequin romance. Readings interspersed with excerpts from feminist theory.

English 20c. Theme and Technique in Twentieth-Century Poetry. Spring 1993. MR. BURROUGHS.

Poets include Yeats, Auden, Heaney, and Walcott.

English 21c. Literature and Medicine. Spring 1993. MS. DIEHL.

A study of narratives that focus upon issues associated with health and illness. We analyze works that deal with medical conditions in order to explore the ways these works construct stories that inform our understanding of the process of diagnosis, therapy, and "cure." Readings include works by Sigmund Freud, Oliver Sacks, Richard Selzer, and Susan Sontag.

English 22c. American Poetry. Spring 1993. MS. GOODRIDGE.

Analysis of poetry by Frost, Williams, Stevens, Moore, H.D., and other contemporary poets.

English 23c. The Comedy of Manners. Spring 1993. MS. KIBBLE.

Focuses on plays from the Restoration and eighteenth century, Frances Burney's *Evelina*, Jane Austen's *Pride and Prejudice*, and Oscar Wilde's *The Importance of Being Earnest*.

English 24c. Drama. Spring 1993. MR. REDWINE.

Emphasis on the close reading and discussion of plays by Shakespeare, Molière, Ibsen, Shaw, Beckett, and others.

English 25c. The Politics of Sexuality. Spring 1993. MS. SUDAN.

Examines the ways in which literature, film, and other texts shape our views about sexual norms and behavior. Topics include the place of sexuality in social arrangements such as marriage and the family, sexuality as a basis for defining gender, sexuality as a means of both political resistance and political control, and contemporary debates about abortion, pornography, and homosexuality. Texts include works by Brontë, Engels, Freud, Kate Chopin, and Woolf, and several films.

Geology 17a. The Maine Coast: Present, Past, and Future. Fall 1992. MR. LEA.

Introduces students to geological field methods and approaches to scientific research through a study of the Maine coast. Through several weekend and half-day field trips and classroom work, students collect information to construct a record of sea-level changes over the last 12,000 years, examine modern coastal environments and processes, and assess the impacts of coastal developments. Class projects include brief reports of field studies and an independent paper.

History 11c. Women in Britain and America—1750–1920. Fall 1994. MS. McMAHON.

A comparative examination of the contribution of women to and the consequences for women of “modernization.” Topics include industrialization and the varieties of employment for women, Victorian culture and domesticity, and women’s rights and woman suffrage. Relies heavily on primary sources: letters, diaries, essays, prescriptive literature, fiction; secondary sources are used as guides in the reading of those contemporary sources. Designed to teach students how to subject primary and secondary source materials to a critical analysis.

History 17c,d. The Cuban Revolution. Fall 1992. MR. WELLS.

The Cuban Revolution recently celebrated its thirtieth anniversary. This seminar offers a retrospective of a revolution entering “middle age” and its prospects for the future. Topics include U.S.-Cuban relations, economic and social justice versus political liberty, gender and race relations, and literature and film in a socialist society.

History 18c. The Vietnam War. Spring 1994. MR. LEVINE.

Examines the Vietnam War. Topics include the nature of Vietnamese society, the impact of French colonialism, the cold war background (domestic and foreign) to American involvement, and the impact of the war on Vietnam and the United States.

History 20c. In Sickness and in Health: Public Health in Europe and the United States. Fall 1992. MS. TANANBAUM.

Introduces a variety of historical perspectives on illness and health. Considers the development of scientific knowledge, and the social, political, and economic forces that have influenced public health policy. Topics include epidemics, maternal and child welfare, AIDS, and national health care.

History 22c,d. Chinese Strategy. Spring 1994. MR. SMITH.
(Same as **Asian Studies 22.**)

History 25c. Popular Culture of the 1980s and 1990s. Spring 1993. MR. SMITH.

Emphasis on recent developments in music, television, and film. Introduces students to a variety of theoretical tools for the analysis of culture, including critical theory and neo-Marxist approaches.

Philosophy 11c. Free Will. Spring 1994. MR. CORISH.

Are our actions free, or at least partly free; or are they wholly caused, or determined, in some sense that makes the notion of freedom inappropriate in descriptions of actions? Are we really responsible agents, as our tradition tells us we are? Readings in contemporary and older materials are used as the basis for the seminar discussions.

[**Philosophy 13c. Basic Problems in Philosophy.**]

Philosophy 15c. Self and Self-Knowledge. Fall 1992. MR. CORISH.

What is the self? What knowledge do we have of the self? Is that knowledge similar to or different from our knowledge of the world about us—that is, is knowledge of the subject similar to or different from knowledge of an object? These and other questions (e.g., personal identity, the unconscious, emotion) are discussed. Readings range from ancient (Plato, Aristotle, Augustine) to modern (Locke, Hume, Kant) and contemporary.

Philosophy 16c. Moral Problems. Fall 1992. MR. SIMON.

Examines a number of moral problems with two goals: (1) to encourage more systematic and analytic thinking about complex and difficult moral issues, and (2) to raise questions concerning how to think about moral problems—that is, to examine how moral reasoning proceeds. The problems to be studied include relativism, utilitarianism and rights theory, abortion, suicide, euthanasia, capital punishment, obligations to poor and starving peoples, affirmative action, and equal opportunity.

Religion 10c. Adam and Eve and the Moral of the Story. Fall 1992.

MS. MAKARUSHKA.

The significance of the myth of origin and fall in Genesis for Western religious self-understanding. Comparison with myths of origin from other cultures. Analysis of the dominant interpretations of Genesis and their implications with regard to power and gender. Exploration of literary texts, films, and artworks that retell the Genesis myth. Reflections on the “moral of the story” as an expression of a culture’s normative values.

Religion 11c. The Book of Job. Spring 1993. MR. LONG.

A study of the biblical story, its questions about human suffering, and its renderings by Western artists, theologians, and philosophers. Readings include works by liberationist theologian Gustavo Gutiérrez, dramatists such as Robert Frost and Elie Wiesel, composer Ralph Vaughan Williams, and philosophers Carl Jung and René Girard.

Foreign-Language Literature Courses in Translation

Each year the Departments of Afro-American Studies, Asian Studies, Classics, German, Romance Languages, and Russian may offer literature courses in English translation that are open to students with no training in the foreign language. For full course descriptions and prerequisites, see the appropriate department listings, pages 36, 46, 62, 103, 158, and 165.

Geology

Professor

Arthur M. Hussey, *Chair*

Associate Professor

Edward P. Laine

Assistant Professor

Peter D. Lea**

Requirements for the Major in Geology

The major consists of the following core courses: **Geology 101, 102, 201, 211, and 241**; and no fewer than four courses from the following electives: **Geology 221, 222, 250, 256, 262, 265, 270, and 278**. **Geology 101** and **102** should be taken during the first year. **Geology 50** and **115** ordinarily will not count toward the major except as approved individually by the department for exceptional circumstances. Majors are advised to take **Chemistry 109**, and either **210** or **240**; **Physics 103**; and **Mathematics 171** by the end of their junior year. A field trip is taken during the spring vacation to illustrate the varied aspects of the geology of selected areas of the United States. All geology majors, coordinate majors, and interdisciplinary majors are required to participate in at least one of these trips during their junior or senior year.

Students interested in majoring in geology should consult with the chair of the department as soon as possible, preferably in their first year.

Interdisciplinary Majors

The department participates in formal interdisciplinary programs in geology and physics and in geology and chemistry. See pages 124–25.

Requirements for the Minor in Geology

The minor consists of two courses chosen from **Geology 50, 101, 102, and 115**, and two courses chosen from **Geology 201, 211, 221, 222, 241, 250, 256, 262, 265, and 270**.

17a. The Maine Coast: Present, Past, and Future. Fall 1992. MR. LEA.
(See page 96 for a full description.)

50a. Geology of Ocean Basins and Margins. Spring 1993.

The processes of erosion and sedimentation of shoreline and near-shore environments, emphasizing the delicate equilibrium of these environments; the morphology of and physical processes operating in the ocean basins; the origin and evolution of ocean basins in light of recent research in plate tectonics; the paleontologic and climatic record preserved in ocean sediments. Three hours of lecture per week. No previous experience in science courses is assumed.

101a. Introduction to Physical Geology. Fall 1992 and Spring 1993.
MR. HUSSEY.

The composition and structure of the earth and the dynamic equilibrium processes that shape the surface of the earth. Field and indoor laboratory studies include the recognition of common rocks and minerals, the interpre-

tation and use of topographic and geologic maps, and dynamics of processes that shape our landscape. Three lectures and one three-hour laboratory per week. No previous experience in science courses is assumed.

102a. Introduction to Historical Geology. Fall 1993. MR. HUSSEY.

The principles involved in the interpretation of geologic history from the rock record and a review of the evolution of the earth and its inhabitants. Laboratory work includes the recognition of fossils and their modes of preservation, interpretation of geologic maps, and the geologic history of the principal tectonic belts of North America. Three hours of lecture, one three-hour laboratory per week, and a weekend field trip.

Prerequisite: **Geology 101** or consent of the instructor.

115a. Introduction to Environmental Sciences. Spring 1994. MR. LEA AND MR. GILFILLAN.

An interdisciplinary introduction to the environmental sciences. Topics include surficial and environmental geology and marine and aquatic ecology. In addition to classroom work, weekly sessions of laboratory work or fieldwork focus on local environmental problems. (Same as **Environmental Studies 115**.)

Prerequisite: **Environmental Studies 101** or consent of the geology department. Enrollment limited to 25 students; preference given to students intending to major in either geology or environmental studies.

[121a. Arctic Landscapes.]

201a. Earth Materials. Spring 1993 and Spring 1995. MR. HUSSEY.

The identification, classification, origin, manner of occurrence, and uses of the principal rock-forming and economic minerals; hand specimen identification of igneous, metamorphic, and sedimentary rocks, and sediment types. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Geology 50** or **101**, or **Chemistry 109**, or **Physics 103**.

211a. Optical Mineralogy and Crystallography. Fall 1993 and Fall 1995. MR. HUSSEY.

A study of the crystallography of minerals and the optical principles and methods of mineral identification using the polarizing microscope. Laboratory work includes the examination and identification of minerals in thin section and as grains in immersion oils using the polarizing microscope; elementary morphological crystallography. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Chemistry 109**, or **Geology 101**, or **Physics 103**.

221a. Sedimentology. Fall 1993 and Fall 1995. MR. LEA.

An examination of sedimentary processes and the composition of sedimentary rocks. Process-related topics include the behavior of sediment-moving fluids, dynamics of sediment transport and deposition, and interpretation of depositional processes from sedimentary structure and texture.

Petrologic topics include identification of sediments in hand specimen and thin section, and diagnosis of sedimentary rocks. Three hours of lecture and one three-hour laboratory per week. Includes local field trips.

Prerequisites: **Geology 101** and **Physics 103**, or consent of the instructor.

222a. Stratigraphy and Depositional Systems. Spring 1994 and Spring 1996. MR. LEA.

Survey of the earth's depositional systems, both continental and marine, with emphasis on interpretation of sedimentary environment from sedimentary structures and facies relationships; stratigraphic techniques for interpreting earth history; and introduction to subsurface analysis of sedimentary basins. Three hours of lecture and one three-hour laboratory per week. Includes local field trips during laboratory periods and a possible three-day trip over spring break.

Prerequisite: **Geology 221** or consent of the instructor.

241a. Structural Geology. Fall 1992 and Fall 1994. MR. HUSSEY.

The primary and secondary structures of rocks, and the interpretation of crustal deformation from these features. Laboratory work includes strain analysis, field techniques, structural interpretation of geologic maps, construction of cross sections, and the use of stereographic projections and orthographic constructions in the solution of structural problems and data presentation. Three hours of lecture and one three-hour laboratory per week. Frequent field trips during laboratory periods and weekends.

Prerequisite: **Geology 101**, or **Geology 50** with consent of the instructor.

250a. Marine Geology and Tectonics. Spring 1993 and Spring 1995. MR. LAINE.

Examines the geological and geophysical bases of the plate tectonics model. The influence of plate tectonics on major events in oceanographic and climatic evolution. Deep-sea sedimentary processes in the modern and ancient ocean as revealed through sampling and remote sensing. Focus in the laboratory on the interpretation of seismic reflection profiles from both the deep ocean and local coastal waters. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Geology 101**.

256a. Environmental Geology. Fall 1993 and Fall 1994. MR. LAINE.

The application of geological and geomorphological principles to the understanding and solution of contemporary and future land-use issues. Principles are mastered through both lectures and the reading of case studies. Field exercise emphasizes observation, mapping, and analysis of geologic information relative to local environmental problems.

Prerequisite: **Geology 101** or consent of the instructor.

262a. Igneous and Metamorphic Petrology. Spring 1994 and Spring 1996. MR. HUSSEY.

The classification, description, and genesis of the common igneous and

metamorphic rock types. Laboratory work is devoted to the identification of rocks in hand specimen and examination of thin sections with the use of the polarizing microscope. Three hours of lecture and one three-hour laboratory per week. Weekend field trip during April.

Prerequisite: **Geology 211**.

265a. Geophysics. Spring 1993 and Spring 1995. MR. LAINE.

An introduction to interpretation methods in geophysics. Topics include seismic reflection and refraction methods, gravity and magnetic modeling, and electrical and thermal prospecting. Specific applications of each of these methods are drawn from the fields of marine geophysics, regional geology, hydrology, and environmental geology. No formal lab is given, but students should expect to spend several full Saturdays in the field making geophysical observations.

Prerequisites: **Physics 103**, **Mathematics 161**, and one of the following—**Geology 101**, **Physics 223**, or **Physics 227**.

270a. Geomorphology. Fall 1992 and Fall 1994. MR. LEA.

The concepts of landform development, emphasizing the relationships between surficial processes and form. Topics include work of streams, waves, wind, and glaciers; climatic geomorphology; and historical aspects of landscape development. Three hours of lecture and one three-hour laboratory per week.

Prerequisite: **Geology 101** or consent of the instructor.

278a. Quaternary Environments. Spring 1993 and Spring 1995.

An examination of methodologies for Quaternary environmental and climatic reconstruction; the geologic record of cyclic Quaternary environmental and climatic change, and implications for the earth's future; Quaternary glacial and periglacial systems, sea-level fluctuations, paleoclimatic records of ocean sediments and glacier ice; stratigraphy and dating methods; response of plant and animal communities to environmental change; and theories of climatic change.

Prerequisite: **Geology 101** or consent of the instructor.

[280a Glacial Geology.]

290a. Intermediate Independent Study. THE DEPARTMENT.

400a. Advanced Independent Study and Honors. THE DEPARTMENT.

German

Professors

Helen L. Cafferty†

Steven R. Cerf

James L. Hodge, *Chair*

Assistant Professor

Kathleen A. O'Connor

Teaching Fellow

Uwe Juras

Requirements for the Major in German

The major consists of seven courses, of which one may be chosen from **51**, **52** and the others from **205–402**. Prospective majors, including those who begin with first- or second-year German at Bowdoin, may arrange an accelerated program, usually including study abroad. Majors are encouraged to consider one of a number of study-abroad programs with different calendars and formats.

Requirements for the Minor in German

The minor consists of **German 102** or equivalent, plus any four courses, of which two must be in the language (**203–398**).

51c. German Literature and Culture in English Translation. Every fall. Enrollment limited to 50 students. This course may be repeated for credit with the contents changed.

The Rise of the Twentieth-Century European Encyclopedic Novel. Fall 1992. MR. CERF.

Focus on the emergence of the twentieth-century European encyclopedic novel from the realistic literary tradition of the second half of the nineteenth century. Three texts are examined: Flaubert's *Madame Bovary* (1857), Mann's *The Magic Mountain* (1924), and Joyce's *Ulysses* (1922). Themes to be discussed include the theory of language, the use of montage, the role of the developmental protagonist, the treatment of contemporary political and social issues, and the function of verbal music. *Taught in English.*

52c. Myth and Heroic Epic of Europe. Spring 1993. MR. HODGE.

Myths, legends, sagas, and other folk literature of the Germanic, Celtic, Slavic, and Finno-Ugric traditions, e.g., the prose and poetic Eddas, Song of the Volsungs, Beowulf, Lay of the Nibelungs, the Mabinogion, the Cycle of Finn, the Cycle of Ulster, Marko the Prince, and the Kalevala. Where possible and desirable, comparisons may be drawn with other mythologies; mythological and legendary material may be supplemented by relevant folkloric, Arthurian, and semihistorical literature. *Taught in English.*

101c, 102c. Elementary German. Every year. Fall 1992. MR. CERF. Spring 1993. MR. HODGE.

Three hours per week of training in grammar, speaking, composition, and reading. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.

203c, 204c. Intermediate German. Every year. Fall 1992. MR. HODGE. Spring 1993. MS. O'CONNOR.

Three hours per week of reading, speaking, composition, and review of grammar. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.

Prerequisite: **German 102** or equivalent.

205c. Advanced German Language. Every year. Fall 1992. MS. O'CONNOR.

Designed to increase oral fluency, compositional skills, and understanding of spoken German. Stylistics and idiomatic usages may be emphasized.

Prerequisite: **German 204** or equivalent.

308c. Introduction to German Literature. Every year. Spring 1993.

MR. CERF.

Introduction to methods of interpretation and critical analysis of works of German literature by genre: e.g., prose fiction, expository prose, lyric poetry, drama, opera, film, etc. Develops students' sensitivity to literary structures and techniques and introduces terminology for describing and analyzing texts.

313c. The Development of Literary Classicism. Fall 1993.

THE DEPARTMENT.

Begins with the reaction against the Age of Reason and continues into the later works of Goethe and Schiller.

Prerequisite: **German 204** or equivalent.

314c. The Romantic Movement. Spring 1994. THE DEPARTMENT.

Its literary philosophy, several schools of thought, and preferred genres, including consideration of such representative or influential figures as Tieck, W. and F. Schlegel, Kleist, Arnim, Brentano, Chamisso, Eichendorff, E. T. A. Hoffmann, and Schopenhauer.

Prerequisite: **German 204** or equivalent.

315c, 316c. Literature of the Nineteenth and Twentieth Centuries.

Fall 1992. MR. HODGE. Spring 1993. MS. O'CONNOR.

German literature from approximately 1830 to 1945. Such authors as Hebbel, Storm, Meyer, Keller, Hauptmann, Hofmannsthal, Mann, Kafka, and Brecht are included.

Prerequisite: **German 204** or equivalent.

317c. German Literature since 1945. Fall 1992. MS. O'CONNOR.

Representative postwar authors from East and West Germany, Austria, and Switzerland.

Prerequisite: **German 204** or equivalent.

319c. The Short Prose Form. Fall 1993. THE DEPARTMENT.

Unique theory, form, and content of the German Novelle as it has developed from Goethe to the present.

Prerequisite: **German 204** or equivalent.

398c. Seminar in Aspects of German Literature and Culture.

Every spring. THE DEPARTMENT.

Work in a specific area of German literature not covered in other departmental courses, e.g., individual authors, literary movements, genres, cultural influences, and literary-historical periods. This course may be repeated for credit with the contents changed.

Prerequisite: **German 204** or equivalent.

The Literary Imagination and the Holocaust. Spring 1993. MR. CERF.

Examines the literary treatment of the Holocaust, the period between 1933 and 1945, during which 11,000,000 innocent people were systematically murdered by the Nazis. Four different literary genres are studied: the diary and memoir, the drama, poetry, and the novel. Particular attention is given to the dramas of Brecht, Zuckmayer, Frisch, and Weiss; the poetry of Sachs and Celan; and the prose of Thomas Mann, Becker, and von Rezzori.

290c. Intermediate Independent Study. THE DEPARTMENT.**400c. Advanced Independent Study and Honors.** THE DEPARTMENT.

Government and Legal Studies

Professors

Charles R. Beitz

Richard E. Morgan, *Chair*

Christian P. Potholm

Jean Yarbrough

Associate Professors

Janet M. Martin

Allen L. Springer**

Assistant Professors

Shaheen Ayubi

Paul N. Franco

Marcia A. Weigle†

Visiting Assistant Professors

John Calabrese

Stephen Manning

Lecturer

Kent J. Chabotar

Requirements for the Major in Government and Legal Studies

Courses within the department are divided into five fields: American government (**Government 200, 201, 202, 203, 204, 210–211, 250, 270, 301, 302, 304, and 341**), comparative politics (**Government 223, 224, 225, 226, 227, 230, 235, 275, 280, 281, 320, 321, and 362**), political theory (**Government 225, 240, 241, 242, 243, 244, 250, 255, 341, 342, 343, and 344**), international relations (**Government 226, 227, 235, 260, 261, 270, 271, 275, 280, 282, 283, 284, 361, 362, and 363**), and public policy (**Government 203, 204, 210–211, 215, 255, 270, 275, 301, 304, and 341**). Every major is expected to complete an area of concentration in one of these fields.

The major consists of one Level A course, six Level B courses, and one Level C course, distributed as follows:

1. A field of concentration, selected from the above list, in which at least two Level B courses and one Level C course are taken.

2. At least one Level B course in each of three fields outside the field of concentration.

3. Students seeking to graduate with honors in government and legal studies must have an excellent academic record. Interested students should contact the honors director for specific details. Students must prepare an honors paper, which is normally the product of two semesters of independent study work, and have that paper approved by the department. One semester of independent study work may be counted toward the eight-course departmental requirement and the three-course field concentration.

Requirements for the Minor in Government and Legal Studies

A minor in government and legal studies will consist of one Level A course and four Level B courses from three of the departmental subfields.

LEVEL A COURSES

Government 100

Introductory Seminars

Topics and course requirements will vary from seminar to seminar and year to year according to the interests of the instructor. All are designed to provide an introduction to a particular aspect of government and legal studies. Students are encouraged to analyze and discuss important political concepts and issues, while developing research and writing skills.

Enrollment is limited to 20 students in each seminar. First-year students are given first priority; sophomores are given second priority. If there are any remaining places, juniors and seniors may be admitted with consent of the instructor.

Fall 1992

[101b. Comparative Politics.]

102b. Caribbean Forms. MR. POTHOLM.

A look at the political landscape of the Caribbean Basin, with particular emphasis on the survival of polyarchal forms in the region, and a comparison of political ingredients found in a number of situations. Some relevant examples to be studied are Barbados, Trinidad, Haiti, Jamaica, Puerto Rico, and Grenada.

103b. The Pursuit of Peace. MR. SPRINGER.

This seminar examines different strategies for preventing and controlling armed conflict in international society, and emphasizes the role of diplomacy, international law, and international organizations in the peace-making process.

104b. Aspects of Comparative Politics. MR. MANNING.

An introductory examination of the principal features of political power in liberal democratic, communist/post-communist, and Third World political systems. The course compares and contrasts political dynamics, with special emphasis on political culture, structure and institutions, parties and elections, and the policy-making process, both within and across the three political worlds.

105b. American Politics: Representation, Participation, and Power.

MS. MARTIN.

An introductory seminar in American national politics. Readings, papers, and discussion explore the changing nature of power and participation in the American polity, with a focus on the interaction between individuals (non-voters, voters, party leaders, members of Congress, the president) and political institutions (parties, Congress, the executive branch, the judiciary).

106b. Aspects of Political Theory. MS. YARBROUGH.

Introduces the fundamental issues of political life: What is justice? What is happiness? Are human beings equal or unequal? What is the relationship between private property and liberty? Private property and justice? Are there moral standards that are prior to law? If so, where do they come from? Nature? History? Readings include works of Plato, Aristotle, Machiavelli, Locke, Marx, and Nietzsche, and the Bible.

108b. Liberalism Ancient and Modern. MR. FRANCO.

An introduction to political philosophy focusing on the fundamental contrast between the classical and modern horizons. After considering the "liberalism" of ancient authors, the course examines the foundations of modern liberal democracy and its impact in the United States. Readings include Plato's *Apology*; Aristotle's *Politics*; Locke's *Second Treatise*; *The Federalist Papers*; and Tocqueville's *Democracy in America*.

109b. Sources and Types of Conflict in International Society.

MR. CALABRESE.

An examination of why conflict occurs within and between states, with particular emphasis on conflict in the Middle East (e.g., the Iranian revolution, the Lebanese civil war, the Arab-Israeli conflict).

Spring 1993

107b. The Resurgence of the Islamic Religion and Politics. MS. AYUBI.

An investigation into the nature and historical development of Islam to present times, with emphasis on the interaction between religion and politics in the Middle Eastern, African, and Asian countries.

Introductory Lectures**160b. Introduction to International Relations.** MR. CALABRESE AND

MR. POTHOLM.

Identifies and explains patterns of interaction among nation-states. Fo-

cuses on developments since World War II, but many lectures draw on material from other periods. Such topics as the nature of humankind and the causes of war, revolutionary change, and the role of international law and organization are considered. Enrollment limited to 150 students.

LEVEL B COURSES

Level B courses are designed generally for students with a previous background in government and legal studies. All, unless otherwise noted, require that a student have taken a Level A course or have received the consent of the instructor. Course requirements will vary, but most courses at this level adopt a lecture format. All Level B courses are limited to 50 students.

[200b. Local Governments.]

201b. Law and Society. Spring 1993. MR. MORGAN.

An examination of the American criminal justice system. Although primary focus is on the constitutional requirements bearing on criminal justice, attention is paid to conflicting strategies on crime control, to police and prison reform, and to the philosophical underpinnings of the criminal law.

Prerequisite: Junior standing.

202b. The American Presidency. Spring 1993. MS. MARTIN.

An examination of the presidency in the American political system, including presidential selection, advisory systems, the institutionalized presidency, and relations with Congress and the courts. Problems and techniques of presidential decision-making.

[203b. Elections, Parties, and Interest Groups in America.]

204b. Congress and the Policy Process. Fall 1992. MS. MARTIN.

An examination of the U.S. Congress, with a focus on the congressional role in the policy-making process. Topics include recent changes in the budgetary process, congressional procedures and their impact on policy outcomes, and executive-congressional relations.

210b. Constitutional Law I. Every fall. MR. MORGAN.

The first semester deals with the development of American constitutionalism, the power of judicial review, federalism, and separation of powers.

Prerequisite: Junior or senior standing, or consent of the instructor.

211b. Constitutional Law II: Civil Rights and Liberties. Every spring. MR. MORGAN.

The second semester deals with questions arising under the First and Fourteenth Amendments.

Prerequisite: **Government 210.**

215b. Public Policy and Administration. Spring 1993. MR. CHABOTAR.

An introduction to governmental and nonprofit decision-making, with

emphasis on strategic planning, fiscal and personnel administration, issues of public interest and merit system, and responses to bureaucratic, political, and economic pressures. Focus on policy-making in education, criminal justice, and the arts.

223b,d. African Politics. Fall 1992. MR. POTHOLM.

An examination of the underlying political realities of modern Africa. Emphasis on the sociological, economic, historical, and political phenomena that affect the course of politics on the continent. While no attempt is made to cover each specific country, several broad subjects, such as hierarchical and polyarchical forms of decision-making, are examined in depth. A panel discussion with African students and scholars is held at the end of the course.

[224b. West European Politics.]

226b. Middle East Politics. Fall 1992. MS. AYUBI.

An examination of the historical, cultural, economic, and social forces that affect Middle East political processes.

227b,d. Ethnicity and Politics in South Asia. Spring 1993. MS. AYUBI.

An examination of the historical, cultural, economic, and social forces that affect the political processes in India, Pakistan, Bangladesh, and Sri Lanka. (Same as **Asian Studies 258.**)

230b. Soviet Politics. Spring 1993. MR. MANNING.

An introduction to the domestic politics of the former Soviet Union. Examines Russian/Soviet society in terms of political, economic, and social development, highlighting the failure of liberalism in Russia, the nature of Stalinist totalitarianism, and the explosive impact of post-Brezhnev reforms. Focuses on changing institutions, the revitalization of political processes, the emergence of a civil society, and nationalism, with a view toward analyzing the consequences of the radical "restructuring" of Russian/Soviet society.

[235b. Advanced Comparative Government.]

240b. Classical Political Philosophy. Fall 1992. MS. YARBROUGH.

Examines the answers of Greek and Roman political philosophers, as well as medieval theologians, to the most pressing human questions: What is the best way to live? What is the relationship of the individual to the political community? What is justice, and how important a virtue is it? Can we rely on human reason to give answers to these questions, or are the answers to our central human concerns ultimately dependent upon revelation and faith? If so, what are the political consequences?

241b. Modern Political Philosophy. Spring 1993. MS. YARBROUGH.

Beginning with Machiavelli and Hobbes, modern political philosophy centers around the question of human freedom. This course explores the central problems to which the concern for freedom gives rise. In particular, it examines the overthrow of the classical horizon, the origin and meaning of

rights, the relationship between liberty and equality, and the replacement of nature with history as the source of human meaning.

243b. Idealist Theories of the State: Rousseau to Hegel. Fall 1992.

MR. FRANCO.

Examines the transformation of modern political philosophy—of the social contract tradition and of the tradition of rights-based liberalism—in the political philosophies of Rousseau, Kant, and Hegel. Focuses on the new understanding of the self and its relation to society that is found in these writers, as well as on their nonempiricist conceptions of freedom and the human will. Topics include the appeal to antiquity, the impact of the French Revolution, and the replacement of nature with history as the source of human meaning.

244b. Liberalism and Its Critics. Spring 1993. MR. FRANCO.

An examination of liberal democratic doctrine and of religious, cultural, and radical criticisms of it in the nineteenth century. Authors include Burke, Tocqueville, Mill, Marx, and Nietzsche.

250b. American Political Thought. Spring 1993. MS. YARBROUGH.

Considers the classic elements of the history of American political thought from the founding period to the present. The course does not attempt to cover every age or every thinker but aims instead for some depth on selected topics of debate between major American political thinkers. Concludes with an exploration of a variety of interpretations of the history of American intellectual and political thought.

[255b. Approaches to Political Science: Quantitative Analysis in Political Science.]

260b. International Law. Fall 1992. MR. SPRINGER.

The modern state system, the role of law in its operation, the principles and practices that have developed, and the problems involved in their application.

270b. American Foreign Policy: Its Formulation and the Forces Determining Its Direction. Spring 1993. MR. CALABRESE.

The major theories concerning the sources and conduct of American foreign policy since World War II. The approach emphasizes the interrelationship of political, social, and economic forces that shape U.S. diplomacy.

Prerequisite: Sophomore standing.

[271b. Soviet Foreign Policy.]

[275b,d. Advanced International Politics: Rich Nations/Poor Nations.]

281b,d. Chinese Politics. Fall 1992. MR. MANNING.

An introduction to contemporary politics in the People's Republic of China. A brief overview of Chinese history is followed by a survey of contemporary analyses of the Chinese political process. Emphasis is given to

Chinese political culture, the major political institutions, current policy issues, and change in the post-Mao era. (Same as **Asian Studies 276.**)

282b. Third World Security. Fall 1992. MR. CALABRESE.

An examination of the different definitions of security in the Third World, as well as the sources and manifestations of insecurity at the individual state and regional levels.

[**283b. International Environmental Law and Organization.**]

[**284b,d. Chinese Foreign Policy.**]

(Same as **Asian Studies 277.**)

LEVEL C COURSES

Level C courses provide seniors (and juniors, with the consent of the instructor) an opportunity to do advanced work within their fields of concentration. This may be done in the context of a seminar or through independent study with a member of the department, or through the honors seminar.

[**301b. Advanced Seminar in American Politics: Reforming the Intelligence Agencies.**]

302b. Colloquium in Law and National Security. Fall 1992.

MR. MORGAN.

304b. Advanced Seminar in American Politics: Presidential-Congressional Relations. Spring 1993. MS. MARTIN.

[**320b. Advanced Seminar in Comparative Politics: Politics and Antipolitics in East Central Europe.**]

321b. Advanced Seminar in Comparative Politics: Democratization in Leninist Systems. Spring 1993. MR. MANNING.

[**341b. Advanced Seminar in Political Theory.**]

[**342b. Advanced Seminar in Political Theory.**]

343b. Advanced Seminar in Political Theory: Contemporary Political Philosophy. Spring 1993. MR. FRANCO.

361b. Advanced Seminar in International Relations: Conflict Simulation and Conflict Resolution. Spring 1993. MR. POTHOLM.

362b. Advanced Seminar in International Relations and Comparative Government: Terrorism. Fall 1992. MS. AYUBI.

400b. Advanced Independent Study and Honors. THE DEPARTMENT.

History

Professors

Daniel Levine, *Chair*
 Paul L. Nyhus
 Allen Wells

Associate Professors

John M. Karl
 Sarah F. McMahon
 G. E. Kidder Smith, Jr.
 Randolph Stakeman

Assistant Professors

Thomas C. Killion
 Susan L. Tananbaum

Lecturer

Kenneth A. Lewallen

Requirements for the Major in History

The departmental offerings are divided into the following fields: Europe (may be divided into two fields: Europe to 1715 and Europe since 1500), Great Britain, the United States, Asia, Africa, and Latin America. In meeting the field requirements, courses in Europe between 1500 and 1715 may be counted toward early or modern Europe but not toward both of them. At least one field must be in Asia, Africa, or Latin America. Students may, with departmental approval, define fields that are different from those specified above. The program chosen to meet the requirements for the major in history must be approved by a departmental advisor.

The major consists of ten courses, distributed as follows:

1. A primary field of concentration, selected from the above list, in which four or more courses are taken. One of the courses must be numbered in the 300s, selected with departmental approval, in which a research essay is written.

2. Two supplemental fields, in each of which two courses are taken.

3. In addition, each student must take two courses in fields outside history but related to his or her primary field of concentration. These courses might be taken, for example, in art history, government, English, any of the language departments, anthropology, sociology, and classics.

All history majors seeking departmental honors will enroll in at least one semester of the Honors Seminar (**History 451, 452**). Its primary requirement is the research and writing of the honors thesis. In addition, the seminar is to provide a forum in which the students, together with the faculty, can discuss their work and the larger historical questions that grow out of it.

With departmental approval a student may offer for credit toward the history major, college-level work in history at other institutions. This work may represent fields other than those that are available at Bowdoin. A student who anticipates study away from Bowdoin should discuss with the department, as early in his or her college career as possible, a plan for the history major that includes work at Bowdoin and elsewhere.

The first-year seminars listed under **History 10–25** are not required for the major, but such seminars may be counted toward the required ten courses.

Before electing to major in history, a student should have completed or have in progress at least two college-level courses in history.

History majors are encouraged to develop competence in one or more foreign languages and to use this competence in their historical reading and research. Knowledge of a foreign language is particularly important for students planning graduate work.

Each major must select a departmental advisor. A student should plan, in consultation with his or her advisor, a program that progresses from introductory to advanced levels. The courses numbered in the 300s presuppose a reasonable background understanding. They are open with the consent of the instructor to history majors and other students, normally juniors and seniors.

Enrollment in history courses numbered 50-299 is limited to 50 students each.

Requirements for the Minor in History

The minor consists of five courses, three to be taken in a field of concentration chosen from the list specified by the department for a major. The remaining two are to be in a subsidiary field selected from the same list.

East Asian Studies Concentration

Majors in history may elect the East Asian studies concentration, which consists of the following requirements: four courses in East Asian history, including at least one research seminar; two courses in a field of history other than East Asian; and four semesters of Chinese or Japanese language.

Foreign study for students interested in East Asian studies is highly recommended. Established programs in Hong Kong, Taiwan, Japan, and the People's Republic of China are available. Consult the instructor in East Asian history for information about various programs.

Course Selection for First-Year Students

Although courses numbered 10-25 and 101-102 are designed as introductory courses, first-year students may enroll in any courses numbered 201-279.

10-25. First-Year Seminars.

The following seminars are introductory in nature. They are designed for first-year students who have little background in history generally or in the period and area in which the particular topic falls. Enrollment is limited to 16 students in each seminar.

Objectives are (a) to cover the essential information relating to the topic, together with a reasonable grounding in background information; (b) to illustrate the manner in which historians (as well as those who approach some of the topics from the point of view of other disciplines) have dealt with certain significant questions of historical inquiry; and (c) to train critical and analytical writing skills.

The seminars are based on extensive reading, class discussion, oral reports, two or three short critical essays, and an examination.

11c. Women in Britain and America: 1750–1920. Fall 1994.

Ms. McMAHON.

(See page 97 for a full description.)

17c,d. The Cuban Revolution. Fall 1992. MR. WELLS.

(See page 97 for a full description.)

18c. The Vietnam War. Spring 1994. MR. LEVINE.

(See page 97 for a full description.)

20c. In Sickness and in Health: Public Health in Europe and the United States. Fall 1992. Ms. TANANBAUM.

(See page 97 for a full description.)

22c,d. Chinese Strategy. Spring 1994. MR. SMITH.

(Same as **Asian Studies 22.**)

(See page 97 for a full description.)

25c. Popular Culture of the 1980s and 1990s. Spring 1993. MR. SMITH.

(See page 97 for a full description.)

103c,d. Asian Civilizations. Fall 1994. MR. SMITH.

An introduction to selected texts of South and East Asian civilizations, emphasizing Buddhist cultures in India, China, and Japan. Frequent short papers, several longer papers. (Same as **Asian Studies 101.**)

104c. History on Film. Spring 1993 and Spring 1994. MR. NYHUS.

Explores topics in Renaissance history as realized by important modern directors. Considers such topics as urban life, the peasant family, the decline of feudalism and the rise of the modern state, witchcraft, and imperialism and the New World, as well as issues of historiography and the ways in which film as a medium both reinforces ideological assumptions about the past and calls them into question. Films include *The Decameron* (Pasolini), *The Return of Martin Guerre* (Vigne), *The Seventh Seal* (Bergman), *Henry V* (the Olivier version of Shakespeare's play), *Day of Wrath* (Dreyer), and *Aguirre, the Wrath of God* (Herzog). Ancillary readings from a variety of sources.

105c. Medieval Spain. Every other year. Fall 1993. MR. NYHUS.

A survey of medieval Spain serving as an introduction to medieval studies. Reviews the many cultures—Visigothic, Islamic, Jewish, and Christian—that flourished in medieval Spain and the relations among these cultures.

106c. Europe and the Non-Western World, 1500–1900. Spring 1993.

MR. KILLION.

A survey of the historical development of a European-dominated world economic system between 1500 and 1900, focusing on social and economic transformations in Africa, Asia, and the Americas. Topics include changing

European perceptions of non-Western peoples; the relationship between slave plantation systems and the rise of European industrial capitalism; the ecological impact of European expansion; and non-Western responses to the European challenge.

[131b,d. The Autobiography of African America.]

(Same as **Afro-American Studies 102.**)

[161b,d. The African Diaspora.]

(Same as **Afro-American Studies 101.**)

201c. Ancient Greece. Fall 1992. MR. NYHUS.

A survey of the political, social, and economic history of Greece from the second millennium B.C. through the Hellenistic period. Focus on the fifth century B.C. Extensive selections of Herodotus and Thucydides, as well as dramatists, poets, and philosophers.

203c. Europe in the Middle Ages, 1050–1300. Spring 1994. MR. NYHUS.

A survey covering political and social institutions as well as intellectual and cultural movements of Europe in the twelfth and thirteenth centuries.

206c. Florence and Strasbourg during the Renaissance. Spring 1993.

MR. NYHUS.

An analysis of the economic, social, and political structures of two key cities of the Renaissance, together with the cultures that made them famous.

207c. Culture and Society in Sixteenth-Century Europe. Fall 1993.

MR. NYHUS.

A survey of Europe in the sixteenth century paying equal attention to Mediterranean and northern societies. Special focus on the relation of literature, art, and music to the study of societies.

211c. Europe 1517–1715: Reformation to Louis XIV. Spring 1994.

MR. KARL.

The Reformation serves as introduction to the social, political, and intellectual development of continental Europe to the death of Louis XIV.

212c. Europe 1715–1848: Enlightenment, Revolution, and Napoleon.

Fall 1992. MR. KARL.

A survey of continental European evolution from the beginning of the eighteenth to the mid-nineteenth century, focusing on the role of the French Revolution in that development, and directed toward the problem of European community.

[214c. Europe 1939 to the Present.]

215c. Nazi Germany. Fall 1993. MR. KARL.

After a brief survey of German development, considers the rise of National Socialism and concentrates on the character and nature of the Nazi dictatorship.

217c. History of Russia to 1825. Spring 1994. MR. KARL.

A broad survey beginning with medieval Russia but concentrating on the rise of Muscovy, Peter the Great, and the development of autocracy and serfdom down to the Decembrist revolt.

218c. History of Russia: 1825 to the Present. Spring 1993. MR. KARL.

Begins with the reign of Nicholas I and focuses mainly on the long-term coming, course, and aftermath of the Revolution of 1917.

[220c. Judaism, Christianity, and Antisemitism.]**221c. History of England, 1485–1688.** Fall 1993. MS. TANANBAUM.

A survey of the political, cultural, religious, social, and economic history of early modern England from the reign of Henry VII, the first Tudor ruler, to the outbreak of the Glorious Revolution. Topics to be considered include the Tudor and Stuart monarchs, the Elizabethan Settlement, the English Civil War, Oliver Cromwell, and the Restoration.

223c. History of England, 1837–1990. Fall 1992. MS. TANANBAUM.

A social history of modern Britain from the rise of urban industrial society in the mid-eighteenth century to the present. Topics include the impact of the Industrial Revolution, acculturation of the working classes, the impact of liberalism, the reform movement, and Victorian society. Concludes with an analysis of the domestic impact of the world wars and of contemporary society.

229c. The Growth of the Welfare State in Britain and America: 1834 to the Present. Spring 1993. MR. LEVINE.

A study in the comparative history of the ideology and institutions of the welfare state in two countries that are similar in some ways but quite different in others. Readings in the laws, legislative debates, ideological statements, and economic and sociological analyses.

230c. Interpretations of American History. Fall 1993. MR. LEVINE.

Considers four or five topics from the American Revolution to the present, all related to social change, including the American Revolution, slavery, Jacksonian democracy, the cold war, and the philosophy of history. Students read different works on the same subject and in class discuss how and why historians come to different conclusions about the same subject. This course is particularly useful for history majors, since there is some explicit concentration on the philosophy of history and historiography. Nonmajors may find the course useful as a review survey of American history and for practice in reading analytically and writing critical essays. *Students should not buy books before the first class, since not all students will read each book.*

231c. Social History of Colonial America, 1607–1763. Fall 1993.

MS. McMAHON.

A study of the founding and growth of the British colonies in North America. Explores the problems of creating a new society in a strange

environment; the effects of particular goals and expectations on the development of the thirteen colonies; the gradual transformation of English, African, and Indian cultures; and the later problems of colonial maturity and stability as the emerging Americans outgrew the British imperial system.

[233c. American Society in the New Nation, 1763–1840.]

235c. The Golden Land: Jews in American Society. Spring 1993. Ms. TANANBAUM.

A social history of Jewish settlement and life in America from the colonial period to the present. Uses literature, films, and primary documents to explore the social and religious patterns of each wave of immigration, analyze the response within and to the Jewish community, and consider the experience of American Jews in the context of American and Jewish history.

239c. The Era of the Civil War and Reconstruction. Spring 1993.

MR. LEVINE.

Examines the period between about 1850 and about 1880. Emphasis on politics, economics, the Supreme Court, and, above all, race relations. Topics include the rise of the Republican party, abolitionism, slavery as an institution and slave society, sectionalism, the war itself and its implications, the politics of Reconstruction, the Freedman's Bureau, and the establishment of a new basis for white domination.

240c. The United States since 1945. Fall 1993. MR. LEVINE.

Consideration of social, intellectual, political, and international history. Topics include the cold war; the survival of the New Deal; the changing role of organized labor; Keynesian, post-Keynesian, or anti-Keynesian economic policies; and the urban crisis. Readings common to the whole class and the opportunity for each student to read more deeply in a topic of his or her own choice. Preregistration limited to first- and second-year students. Others may enroll as room is available.

[242c,d. The Pan-African Idea.]

(Same as **Afro-American Studies 201.**)

243c. The Civil Rights Movement. Fall 1992. MR. LEVINE.

Concentrates on the period from 1954 to 1970 and shows how various individuals and groups have been pressing for racial justice for decades. Special attention is paid to social action groups ranging from the NAACP to the SNCC, and to important individuals, both well known (Booker T. Washington) and less well known (John Doar). Readings mostly in primary sources. Extensive use of the PBS video series "Eyes on the Prize."

(Same as **Afro-American Studies 241.**)

246c. Women in American History, 1600–1900. Fall 1992.

Ms. MCMAHON.

A social history of American women from the colonial period through the nineteenth century. Examines the changing roles and circumstances of

women in both public and private spheres, focusing on family responsibilities, paid and unpaid work, education, ideals of womanhood, women's rights, and feminism. Class, ethnic, religious, and racial differences—as well as common experiences—are explored.

[247c. American Women in the Twentieth Century.]

248c. Family and Community in American History. Spring 1993.
Ms. McMAHON.

Examines the American family as a functioning social and economic unit within the community from the colonial period to the present. Topics include gender relationships; the purpose of marriage; philosophies of child-rearing; demographic changes in family structure; organization of work and leisure time; relationships between nuclear families and both kinship and neighborhood networks; and the effects of industrialization, urbanization, immigration, and social and geographic mobility on patterns of family life.

[249c. America's Working Women.]

250c,d. History of Mexico. Fall 1994. MR. WELLS.

Traces the historical evolution of the United States' southern neighbor, Mexico. After a look at the pre-Hispanic past, Spanish settlement and colonization, and the chaotic nineteenth century, the course examines twentieth-century Mexico and its problems and prospects for the future. Topics include U.S.-Mexico relations, immigration and other "border" problems, the debt crisis, the oil syndrome, the future of the PRI in Mexico, and the impact of revolutionary movements in Central America on Mexico.

252c,d. Colonial Latin America. Fall 1993. MR. WELLS.

Analyzes the formative stages of "traditional" Latin American society. Traces the development of the new culture brought about by the fusion of European, Native American, and African elements. Topics include ancient Indian civilizations; the transition from a conquest to a settler society; European institutions of domination and control (land, labor, and religion); the legacy of race mixture; tensions between Europe and the colonies; and the Wars of Independence.

255c,d. Modern Latin America. Spring 1994. MR. WELLS.

Traces the roots of revolutionary discontent in Latin America from a Latin American, as well as a North American, perspective. This topical survey of Latin American history, from its independence wars through the calamitous nineteenth century to the unstable 1980s, explores the following topics: neocolonialism, dictators and the role of the military, U.S.-Latin American relations, imperialism, and the internal/external dynamic of revolutionary movements in the hemisphere.

256c,d. Comparative Slavery. Fall 1992. MR. WELLS.

Examines the comparative evolution of slavery from ancient times through the nineteenth century. After a careful consideration of a number of reference

points from the Old World—Ancient Greece, Rome, and Christianity—the bulk of the course investigates slavery in Latin America and the United States. Topics include the nature of slavery; slavery, power, and the legal process; the slave trade; the family; religion; rebellions and everyday forms of resistance; and abolition and its aftermath. (Same as **Afro-American Studies 256.**)

258c,d. Latin American Revolutions. Spring 1993. MR. WELLS.

Examines revolutionary change in Latin America from a historical perspective, concentrating on two successful revolutions, those of Cuba and Nicaragua, and one case of thwarted revolutionary action, in Chile. Popular images and orthodox interpretations are challenged and new propositions about these processes tested. External and internal dimensions of each movement are analyzed, and each revolution is discussed in the full context of the country's historical development.

259. The Modern Middle East: The Arab-Israeli Conflict. Spring 1995. MS. TANANBAUM.

A historical overview of the Middle East during the nineteenth and twentieth centuries. Focuses on the disintegration of the Ottoman Empire, the role of Islam, British rule in the region, Palestine, and Jewish and Arab nationalism, and ends with an analysis of the *intifada*, the Palestinian uprising.

261c,d. African Kingdoms. Fall 1992. MR. KILLION.

An introduction to African political and economic development prior to large-scale European penetration of the continent. The principal focus is the relationship between economic growth and social organization in the Sudanic belt, Ethiopia, and Southern Africa before 1800. Topics include the growth of long-distance trade, the origins and structure of divine kingship, the expansion of slavery and serfdom, and the impact of Islam. Readings emphasize original African sources where possible. (Same as **Afro-American Studies 261.**)

262c,d. Africa and the Slave Trade: 1500–1850. Spring 1993.

MR. KILLION.

The roots of contemporary African economic dependency often are traced to the impact of the Atlantic slave trade during the period from 1500 to 1850. This course focuses on the slave trade from an African perspective, exploring the relationship between the trade and economic and political change in all parts of Africa. (Same as **Afro-American Studies 262.**)

[264c,d. Muslim Africa.]

[265c,d. Southern Africa and European Imperialism.]

266b,d. Poverty and Development in Africa. Fall 1992. MR. KILLION.

A history of poverty and development in colonial and post-colonial Africa. Topics include famine and ecological crisis; political dimensions of underdevelopment; women's impoverishment; labor migration and a critique of

international development projects. Readings include novels by African writers.

[267c,d. Africa under Colonial Rule: 1880–1980.]

(Same as **Afro-American Studies 267.**)

270c,d. Chinese Thought in the Classical Period. Spring 1994.

MR. SMITH.

An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. (Same as **Asian Studies 270.**)

271c,d. The Material Culture of China in the Warring States' Period.

Fall 1992. MR. SMITH.

Addresses material culture in China from ca. 400 to 100 B.C., while the great unification of empire was occurring. Topics include what people ate; how they wrote, fought, and built; how we know such things about them; and how this civilization can be compared with others. (Same as **Asian Studies 271.**)

274c,d. Chinese Society in the Ch'ing. Fall 1993. MR. SMITH.

An introduction to premodern China, focusing on the first half of the Ch'ing dynasty (1644–1911). Discussion of societal relations, state organization, and ideology. Culminates in a day-long simulation of elite society in the eighteenth century. (Same as **Asian Studies 274.**)

[275c,d. Modern China.]

(Same as **Asian Studies 275.**)

278c,d. The Foundations of Tokugawa Japan. Spring 1993. MR. SMITH.

Addresses problems in the creation and early development of the Tokugawa (1600–1868) state and society, including the transformation of the samurai from professional warriors into professional bureaucrats and the unanticipated growth of a quasi-autonomous urban culture. (Same as **Asian Studies 278.**)

Problems Courses

Courses **300** through **373** involve the close investigation of certain aspects of the areas and periods represented. Following a reading in and a critical discussion of representative primary and secondary sources, students develop specialized aspects as research projects, culminating in oral presentations and written essays. Adequate background is assumed, the extent of it depending on whether these courses build upon introductory courses found elsewhere in the history curriculum. Enrollment in these courses requires the consent of the instructor and is limited to 16 students. Majors in fields other than history are encouraged to consider these seminars.

*Problems in Early European History***300c. The Social History of the Reformation.** Fall 1992. MR. NYHUS.

A research seminar on the social structures of Germany, France, and Switzerland in the early sixteenth century, together with a study of the program of the reformers and the reasons for the popular reception of that program.

*Problems in Modern European History***310c. The French Revolution, 1789–1795.** Spring 1993. MR. KARL.

A research seminar open to any major, with a research paper. Preference given to seniors and juniors, in that order.

311c. Nazi Germany. Fall 1992. MR. KARL.

A research seminar, with a major research project and paper. Preference given to seniors; thereafter, to juniors with **History 215** or equivalent.

*Problems in British History***321c. The Victorian Age.** Spring 1993. MS. TANANBAUM.

An interdisciplinary study of the Victorian era in England. Explores the changing political milieu, issues of industrial progress and poverty, the status of men and women in domains such as home, work, health, education, and philanthropy. Emphasizes critical reading of primary and secondary sources, discussion, and research methods.

322c. Race, Gender, and Ethnicity in British Society. Fall 1994.

MS. TANANBAUM.

An analysis of multiculturalism in Britain. Explores the impact of immigration on English society, notions of cultural pluralism, and the changing definitions and implications of gender in England from the late eighteenth century to the present. Students undertake research projects utilizing primary sources.

*Problems in American History***331c. A History of Women's Voices in America.** Fall 1993. MS. MCMAHON.

An examination of women's voices in American history: private letters, journals, and autobiographies; short stories and novels; advice literature; essays and addresses. Research topics focus on the content and form of the writings as they illuminate women's responses to their historical situation.

Prerequisite: **History 246** or **248**, or consent of the instructor.

332c. Community in America, 1600–1900. Fall 1992. MS. MCMAHON.

Explores the ideals of community in American history, focusing on change, continuity, and diversity in the social, economic, and cultural realities of community experience. Examines the formation of new communities on a "frontier" that moved westward from the Atlantic to the Pacific; the changing face of community that accompanied modernization, urbaniza-

tion, and suburbanization; and the attempts to create alternative communities either separate from or contained within established communities.

333c. Research in Twentieth-Century African-American History.

Fall 1993. MR. LEVINE.

Bowdoin has extensive source collections on this subject: papers of the Congress of Racial Equality and of the Student Non-Violent Coordinating Committee; White House Central Files of Civil Rights during the Kennedy and Johnson administrations; FBI surveillance records; and much more. Students' research centers on this material. (Same as **Afro-American Studies 333.**)

Prerequisite: Any course in twentieth-century U.S. history. Preference given to students with previous background in African-American history.

334c. The Thirties. Fall 1992. MR. LEVINE.

Examines the Depression, the New Deal, American Communism, the formative years of the "New York Intellectuals," and the transformations in the American labor movement. A major research paper is required.

[335c,d. The African-American Critique of America.]

(Same as **Afro-American Studies 335.**)

Problems in Latin American History

350c,d. Economic Theory and the Problem of Underdevelopment in Latin America. Fall 1993. MR. WELLS.

The first part of this seminar examines economic theories that historically have been advanced to explain the process of development (and underdevelopment) in Latin America. In the latter portion of the course, students test these theories by applying them to a specific economic problem currently facing Latin America.

Prerequisite: **History 252** and/or **History 255**.

351c,d. The Mexican Revolution. Spring 1994. MR. WELLS.

An examination of the Mexican Revolution (1910–20) and its impact on modern Mexican society. Topics include the role of state formation since the revolution; agrarian reform; U.S.-Mexican relations; the debt crisis; and immigration and other "border" issues.

Prerequisite: **History 252** and/or **History 255**.

352c,d. Land and Labor in Latin America. Spring 1993. MR. WELLS.

Examines some of the most significant conceptual problems related to Latin American agrarian history. Topics include pre-Columbian land and labor patterns; haciendas and plantations; slavery, debt peonage, and other forms of coerced labor; and the role of family elite networks throughout Latin America.

Prerequisite: **History 252** and/or **History 255**.

*Problems in African History***[361c,d. Greater Ethiopia.]***Problems in Asian History***370c,d. Problems in Chinese History.** Every fall. MR. SMITH.

Reviews the whole of Chinese history. Students develop their research skills and write a substantial research paper. (Same as **Asian Studies 370.**)

290c. Intermediate Independent Study. THE DEPARTMENT.**400c. Advanced Independent Study.** THE DEPARTMENT.**451c, 452c. Honors Seminar.** Every year. THE DEPARTMENT.

Interdisciplinary Majors

A student may, with the approval of the departments concerned and the Recording Committee, design an interdisciplinary major to meet an individual, cultural, or professional objective.

Bowdoin has seven interdisciplinary major programs that do not require the approval of the Recording Committee because the departments concerned have formalized their requirements. These programs are in art history and archaeology, art history and religion, chemical physics, computer science and mathematics, geology and chemistry, geology and physics, and mathematics and economics. A student wishing to pursue one of these majors needs the approval of the departments concerned.

Art History and Archaeology

Requirements

1. **Art 101, 212, 222**, and one of **Art 302** through **388**; **Archaeology 101, 102**, and any three additional archaeology courses, at least one of which must be at the 300 level.

2. Any two art history courses numbered **10** through **388**.

3. One of the following: **Classics 51** or **290** (Independent Study in Ancient History); **History 201** or **202**; **Philosophy 111**; or an appropriate course in religion at the 200 level.

4. Either **Art 400** or **Classics 400** (Independent Study in Archaeology).

Art History and Religion

Requirements

1. **Art History 101, 110**; **Religion 101, 102**, and **103**. It is strongly recommended that **Art History 101** and **Religion 101** be taken before the end of the sophomore year. **Art History 110** and **Religion 102** and **103** should also be taken as early as possible. No other introductory course (10–199) in either department will count toward the major.

2. Three additional courses at the intermediate or advanced level must be taken in each department. At least one, but not more than two, must be an independent study with an interdisciplinary emphasis.

3. Also required are four appropriately distributed courses outside the art history and religion departments. Recommended are courses in studio art, philosophy of art, history, literature, or a science.

Within this framework, the student will design his or her own major in consultation with an advisor from each department.

Chemical Physics

Requirements

1. **Chemistry 109, 251; Mathematics 161, 171, and 181 or 223; Physics 103, 227, 300.**

2. Either **Chemistry 252** or **Physics 310**.

3. Three courses from **Chemistry 252, 332, 335, 340, 350, 401, 402; Physics 223, 228, 229, 310, 320, 350, 451, 452**. At least two of these must be below the 400 level.

Computer Science and Mathematics

Requirements

1. Six courses in computer science as follows: **Computer Science 101, 102, 220, and 231**, and two electives numbered 250 or above.

2. **Mathematics 289**, which is cross-listed as **Computer Science 289**.

3. Six courses in mathematics as follows: **Mathematics 181, 222, 225, and 228**, and two electives from among **Mathematics 244, 249, 262, and 288**.

Geology and Chemistry

Requirements

1. **Chemistry 109** and four courses from the following: **Chemistry 210, 225, 226, 240, 251**, and approved advanced courses.

2. **Geology 101, 102, and 201**.

3. Three courses from the following: **Geology 211, 221, 222, 241, 250, 256, 262, 265, and 278**.

4. **Physics 103** and **Mathematics 161** and **171**.

There are many different accents a student can give to this major, depending on his or her interests. For this reason, the student should consult with the geology and chemistry departments in selecting electives.

Geology and Physics

Requirements

1. **Chemistry 109; Geology 101, 102, 241, 262; Mathematics 161, 171; Physics 103, 223, 227.**

2. Either **Physics 255** or **300**.

3. Two additional courses in geology and/or physics.

Mathematics and Economics

Requirements

1. Seven courses in mathematics as follows: **Mathematics 181, 222, 225, 249, 265**; either **Computer Science 101** or **Mathematics 205** or **244**; and one of **Mathematics 223, 224, 263, or 269**.

2. Six courses in economics as follows: **Economics 101, 102, 255, 256, 316**, and one other 300-level course.

Latin American Studies

Coordinated by the Committee on Latin American Studies

Latin American studies is an integrated interdisciplinary program that explores the cultural heritage of Mesoamerica, the Caribbean, and the South American continent. This multidisciplinary approach is complemented by a concentration in a specific discipline. Competence in Spanish (or another appropriate language with the approval of the administering committee) is required, and it is recommended that students participate in a study-away program in Latin America. Upon their return, students who study away should consider an independent study course to take advantage of their recent educational experience.

Requirements for the Minor in Latin American Studies

The minor consists of at least one course at Bowdoin beyond the intermediate level in Spanish, **History 255** (Modern Latin American History), and three additional courses, two of which must be outside the student's major department. Independent studies can meet requirements for the minor only with the approval by the Latin American Studies Committee of a written prospectus of the independent study.

The Latin American studies courses below may also be used to formulate a student-designed major.

CROSS LISTINGS

(For full course descriptions and prerequisites, see the appropriate department listings.)

English

53c,d. The New Latin American Film. Fall 1992. Ms. KASTER.

Government and Legal Studies

102b. Caribbean Forms. Fall 1992. MR. POTHOLM.

History

- 17c,d. **The Cuban Revolution.** Fall 1992. MR. WELLS.
 250c,d. **The History of Mexico.** Fall 1994. MR. WELLS.
 252c,d. **Colonial Latin America.** Fall 1993. MR. WELLS.
 255c,d. **Modern Latin America.** Spring 1994. MR. WELLS.
 256c,d. **Comparative Slavery.** Fall 1992. MR. WELLS.
 258c,d. **Latin American Revolutions.** Spring 1993. MR. WELLS.
 350c,d. **Economic Theory and the Problem of Underdevelopment in Latin America.** Fall 1993. MR. WELLS.
 351c,d. **The Mexican Revolution.** Spring 1994. MR. WELLS.
 352c,d. **Land and Labor in Latin America.** Spring 1993. MR. WELLS.

Spanish

- 205c. **Advanced Spoken and Written Spanish.** Every fall. MR. TURNER.
 313c,d. **Indigenous and Hispanic Literature of Colonial Latin America.** Fall 1992. MS. JAFFE.
 314c,d. **Modern Spanish-American Literature.** Every year. Spring 1993. MR. TURNER.
 321c. **Nineteenth-Century Latin American Literature.** Spring 1993. MS. JAFFE.
 322c. **Visions of History.** Fall 1992. MR. TURNER.

Mathematics*Professors*

William H. Barker
 Stephen T. Fisk
 Charles A. Grobe, Jr., *Chair*
 R. Wells Johnson
 James E. Ward

Associate Professor

Rosemary A. Roberts

Assistant Professors

Robert J. Knapp
 Sharon L. Pedersen
 Noreen R. Sharpe

Requirements for the Major in Mathematics

A major consists of at least eight courses numbered 200 or above, including at least one of the following—**Mathematics 262, 263, 286**, or a course numbered in the 300s.

A student must submit a planned program of courses to the department when he or she declares a major. That program should include both theoretical and applied mathematics courses, and it may be changed later with the approval of the departmental advisor.

All majors should take basic courses in algebra (e.g., **Mathematics 222** or **262**) and in analysis (e.g., **Mathematics 223** or **263**), and they are strongly

encouraged to complete at least one sequence in a specific area of mathematics. Those areas are algebra (**Mathematics 222, 262, and 302**); analysis (**Mathematics 243, 263, and 303**); applied mathematics (**Mathematics 224, 264, and 304**); probability and statistics (**Mathematics 225, 265, and 305**); and geometry/topology (**Mathematics 247, 286, and 287**). In exceptional circumstances, a student may substitute a quantitative course from another department for one of the eight mathematics courses required for the major, but such a substitution must be approved in advance by the department. Without specific departmental approval, no course which counts toward another department's major or minor may be counted toward a mathematics major or minor.

Majors who have demonstrated that they are capable of intensive advanced work are encouraged to undertake independent study projects. With the prior approval of the department, such a project counts toward the major requirement and may lead to graduation with honors in mathematics.

Requirements for the Minor in Mathematics

A minor in mathematics consists of a minimum of four courses numbered 200 or above, at least one of which must be **Mathematics 243, 247, or any mathematics course numbered 262 or above**.

Interdisciplinary Majors

The department participates in interdisciplinary programs in mathematics and economics and in computer science and mathematics. See pages 124–25.

Listed below are some of the courses recommended to students with the indicated interests.

For secondary school teaching: **Computer Science 101, Mathematics 222, 225, 242, 247, 262, 263, 288**.

For graduate study: **Mathematics 222, 223, 243, 262, 263, 286, and at least one course numbered in the 300s**.

For engineering and applied mathematics: **Mathematics 223, 224, 225, 243, 244, 264, 265, 288, 304**.

For mathematical economics and econometrics: **Mathematics 222, 223 or 263, 225, 244, 249, 265, 269, 288, 305, and Economics 316**.

For computer science: **Computer Science 220, 231; Mathematics 222, 225, 228, 244, 249, 262, 265, 288, 289**.

For operations research and management science: **Mathematics 222, 225, 249, 265, 269, 288, 305, and Economics 316**.

50a. Topics in Mathematics. THE DEPARTMENT.

Designed for students who wish to learn something about the spirit of modern mathematics and who do not plan to take other mathematics courses. Emphasis on the history and origins of mathematical problems; the development of the ideas, language, and symbolism needed to deal with those problems; and the ramifications and applications of the theory to

current quantitative problems in a variety of disciplines. Topics are chosen from geometry, number theory, probability, game theory and optimization, graph theory, topology, and computing.

60a. Introduction to College Mathematics. Spring 1993.

THE DEPARTMENT.

Material selected from the following topics: combinatorics, probability, modern algebra, logic, linear programming, and computer programming. This course, followed by **Mathematics 161**, is intended as a one-year introduction to mathematics and is recommended for those students who intend to take only one year of college mathematics.

75a. Introduction to Statistics and Data Analysis. Every other spring. Spring 1994. MRS. ROBERTS.

Students learn to draw conclusions from data using exploratory data analysis and statistical techniques. Examples are drawn primarily from the life sciences. The course includes topics from exploratory data analysis, the planning and design of experiments, the analysis of normal measurements, and nonparametric inference. The computer is used extensively.

Open to students whose secondary school background has included at least three years of mathematics. Not open to students who have taken a college-level statistics course (such as **Psychology 250** or **Economics 257**).

161a. Differential and Integral Calculus I. Every semester.

THE DEPARTMENT.

An introduction to limits; the derivatives of rational functions and trigonometric functions; rules for differentiation; applications of differentiation to rates of change; curve sketching; extremal problems and linear motion; introduction to integration and integration by substitution; the Fundamental Theorem of Calculus; and applications of integration to the calculation of areas and volumes.

Mathematics 161 may be taken as either a lecture or a self-paced course in the fall semester, but only as a self-paced course in the spring semester. Open to students whose secondary school background has included at least three years of mathematics.

171a. Differential and Integral Calculus II. Every semester.

THE DEPARTMENT.

The natural logarithm and exponential functions; an introduction to first-order differential equations; the inverse trigonometric functions; techniques of integration and numerical integration; improper integrals and l'Hôpital's Rule; infinite sequences and series; convergence tests; power series and Taylor series. **Mathematics 171** may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 161** or equivalent.

172a. Differential and Integral Calculus II, Advanced Section.

Every fall. MR. JOHNSON.

Improper integrals and l'Hôpital's Rule; infinite sequences and series; convergence tests; power series and Taylor series; complex numbers; separable differential equations; first- and second-order constant coefficient linear differential equations; and applications.

Open to students whose background includes the equivalent of **Mathematics 161** and the first half of **Mathematics 171**.

181a. Multivariate Calculus with Linear Algebra. Every semester.

THE DEPARTMENT.

Multivariate calculus in two and three dimensions, and an introduction to linear algebra. The calculus topics include vector geometry and the calculus of curves; differentiation; the partial derivatives of real-valued functions; the gradient, directional derivatives, approximations using the tangent plane, and applications to extremal problems; and multiple integration in two and three dimensions. The linear algebra topics include Gaussian elimination, matrix algebra, and an introduction to vector spaces with an emphasis on \mathbb{R}^n . Applications from the physical and the social sciences are discussed as time permits. **Mathematics 181** may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 171** or equivalent.

[205a. Applied Multivariate Statistics.]**222a. Linear Algebra.** Every year in alternate semesters. Fall 1992.

MR. GROBE.

Topics include vectors, matrices, determinants, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors, and quadratic forms. Applications to linear equations, conics, quadric surfaces, least-squares approximation, Fourier series, and cryptography.

Prerequisite: **Mathematics 181** or consent of the instructor.

223a. Vector Calculus. Every year in alternate semesters. Spring 1993.

THE DEPARTMENT.

The basic concepts of multivariate and vector calculus. Topics include continuity; the derivative as best affine approximation; the chain rule; Taylor's theorem and applications to optimization; Lagrange multipliers; linear transformations and Jacobians; multiple integration and change of variables; line and surface integration; gradient, divergence, and curl; conservative vector fields; and integral theorems of Green, Gauss, and Stokes. Applications from economics and the physical sciences are discussed as time permits.

Prerequisite: **Mathematics 181**.

224a. Applied Mathematics I. Every year in alternate semesters. Spring 1993. MR. KNAPP.

An introduction to the theory of ordinary differential equations with diverse applications to problems arising in the natural and social sciences. Emphasis on the rigorous development of the different methods of solution. Topics include first-, second-, and higher-order equations with applications in qualitative stability and oscillation theory, Laplace transforms, series solutions, and the existence and uniqueness theorems. A few numerical methods are introduced sporadically during the course. Knowledge of BASIC, FORTRAN, or Pascal is helpful.

Prerequisite: **Mathematics 181** or concurrent registration in **181**.

225a. Probability. Every fall. MR. BARKER.

A study of the mathematical models used to formalize nondeterministic or "chance" phenomena. General topics include combinatorial models, probability spaces, conditional probability, discrete and continuous random variables, independence and expected values. Specific probability densities, such as the binomial, Poisson, exponential, and normal, are discussed in depth.

Prerequisite: **Mathematics 181**.

228a. Discrete Mathematical Structures. Every spring. THE DEPARTMENT.

An introduction to logic, reasoning, and the discrete mathematical structures that are important in computer science. Topics include propositional logic, types of proof, induction and recursion, sets, counting, functions, relations, and graphs.

Prerequisite: **Mathematics 161** or consent of the instructor.

231a. Algorithms. Every year. Fall 1992. MR. GARNICK.

The study of algorithms concerns programming for computational expediency. The course covers practical algorithms as well as theoretical issues in the design and analysis of algorithms. Topics include trees, graphs, sorting, dynamic programming, NP-completeness, and parallel algorithms. (Same as **Computer Science 231**.)

Prerequisites: **Computer Science 102** and **Mathematics 228**, or consent of the instructor.

242a. Number Theory. Every other fall. Fall 1992. MR. JOHNSON.

A standard course in elementary number theory which traces the historical development and includes the major contributions of Euclid, Fermat, Euler, Gauss, and Dirichlet. Prime numbers, factorization, and number-theoretic functions. Perfect numbers and Mersenne primes. Fermat's theorem and its consequences. Congruences and the law of quadratic reciprocity. The problem of unique factorization in various number systems. Integer solutions to algebraic equations. Primes in arithmetic progressions. An effort is made to collect along the way a list of unsolved problems.

243a. Functions of a Complex Variable. Every other fall. Fall 1993.

MR. GROBE.

The differential and integral calculus of functions of a complex variable. Cauchy's theorem and Cauchy's integral formula, power series, singularities, Taylor's theorem, Laurent's theorem, the residue calculus, harmonic functions, and conformal mapping.

Prerequisite: **Mathematics 181** or consent of the instructor.

244a. Numerical Analysis. Every year in alternate semesters. Fall 1992.

MS. SHARPE.

An introduction to the numerical solutions of mathematical problems. Topics include computational aspects of linear algebra, approximation theory, numerical differentiation and integration, and numerical methods for differential equations. Students are required to develop computer programs for the topics covered; additional instructional time is scheduled each week for computer laboratory demonstrations and experiments.

Prerequisites: **Mathematics 181** or **222**.

247a. Geometry. Every other fall. Fall 1993. MS. PEDERSEN.

A survey of classical Euclidean and non-Euclidean geometry. Neutral geometry: the common ground of both Euclidean and non-Euclidean geometry. Parallel postulates. Hyperbolic and elliptic geometry.

Prerequisite: **Mathematics 181** or consent of the instructor.

249a. Linear Programming and Optimization. Every other fall. Fall 1992.

MR. FISK.

A survey of some of the mathematical techniques for optimizing various quantities, many of which arise naturally in economics and, more generally, in competitive situations. Production problems, resource allocation problems, transportation problems, and the theory of network flows. Game theory and strategies for matrix games. Emphasis on convex and linear programming methods, but other nonlinear optimization techniques are presented. Includes computer demonstrations of many of the techniques that are discussed.

Prerequisite: **Mathematics 181**.

262a. Introduction to Algebraic Structures. Every year in alternate semesters. Spring 1993.

A study of the basic arithmetic and algebraic structure of the common number systems, polynomials, and matrices. Axioms for groups, rings, and fields, and an investigation into general abstract systems that satisfy certain arithmetic axioms. Properties of mappings that preserve algebraic structure.

Prerequisite: **Mathematics 222**, or **Mathematics 181** and consent of the instructor.

263a. Introduction to Analysis. Every year in alternate semesters.

Fall 1992. Ms. PEDERSEN.

Emphasizes proof and develops the rudiments of mathematical analysis. Topics include an introduction to the theory of sets and topology of metric spaces, sequences and series, continuity, differentiability, and the theory of Riemann integration. Additional topics may be chosen as time permits.

Prerequisite: **Mathematics 171**.

264a. Applied Mathematics II. Every other spring. Spring 1994.

MR. KNAPP.

A continuation of **Mathematics 224** and an introduction to dynamical systems. Topics include series solutions and special functions, the applications of linear algebra and vector analysis to the solutions of systems of first-order linear differential equations, stability of linear systems, Green's functions and inhomogeneous equations, and nonlinear equations, with emphasis on stability of equilibria, perturbation theory, chaos theory, and a few numerical methods. Knowledge of a programming language is helpful.

Prerequisite: **Mathematics 224**.

265a. Statistics. Every spring. MRS. ROBERTS.

An introduction to the fundamentals of mathematical statistics. General topics include likelihood methods, point and interval estimation, and tests of significance. Applications include inference about binomial, Poisson, and exponential models, frequency data, and analysis of normal measurements.

Prerequisites: **Mathematics 181** and **225**.

269a. Seminar in Operations Research and Mathematical Models. Every other spring. Spring 1993.

Selected topics in operations research and some of the mathematical models used in economics. Emphasis is on probabilistic models and stochastic processes, with applications to decision analysis, inventory theory, forecasting, and queueing theory.

Prerequisites: **Mathematics 225** and **249**, or consent of the instructor.

286a. Topology. Every other spring. Spring 1993. Ms. PEDERSEN.

An introduction to both point-set and geometric topology centered on the fundamental notion of topological space and continuous function. Topics include fundamentals of point-set topology, with special emphasis on homeomorphisms, compactness, connectedness, and separation. Geometric applications include fixed point theorems, surfaces, covering spaces, the Jordan curve theorem, and an introduction to knots and links.

Prerequisite: **Mathematics 263** or consent of the instructor.

287a. Advanced Topics in Geometry. Every other spring. Spring 1994.

One or more selected topics from classical geometry, projective geometry, algebraic geometry, or differential geometry.

Prerequisite: **Mathematics 247**.

288a. Combinatorics and Graph Theory. Every other spring.

Spring 1993. MR. FISK.

An introduction to combinatorics and graph theory. Topics to be covered may include enumeration, matching theory, generating functions, and partially ordered sets. Applications cover Latin squares, designs, and graph algorithms.

Prerequisite: **Mathematics 171.**

289a. Theory of Computation. Every fall. MR. TUCKER.

The theoretical principles that underlie formal languages, automata, computability, and computational complexity. Topics include regular and context-free languages, finite and pushdown automata, Turing machines, Church's thesis, Gödel numbering, and unsolvability. (Same as **Computer Science 289.**)

Prerequisite: **Mathematics 228** or consent of the instructor.

302a. Advanced Topics in Algebra. Every other spring. Spring 1994.

One or more specialized topics from abstract algebra and its applications.

Prerequisite: **Mathematics 262.**

303a. Advanced Topics in Analysis. Every other spring. Spring 1993.

One or more selected topics from analysis. Topics may be chosen from Lebesgue integration, general measure and integration theory, Fourier analysis, Hilbert and Banach space theory, and spectral theory.

Prerequisite: **Mathematics 263.**

304a. Advanced Topics in Applied Mathematics. Every other fall.

Fall 1992. MR. KNAPP.

One or more selected topics in applied mathematics. Material selected from the following: Fourier series, partial differential equations, integral equations, calculus of variations, bifurcation theory, asymptotic analysis, applied functional analysis, and topics in mathematical physics.

Prerequisite: **Mathematics 264.**

305a. Advanced Topics in Probability and Statistics. Every other fall.

Fall 1992. MRS. ROBERTS.

One or more specialized topics in probability and statistics. Possible topics include regression analysis, nonparametric statistics, logistic regression, and other linear and nonlinear approaches to modeling data. Emphasis is on the mathematical derivation of the statistical procedures and on the application of the statistical theory to real-life problems.

Prerequisites: **Mathematics 222** and **265** or consent of the instructor.

290a. Intermediate Independent Study. THE DEPARTMENT.**400a. Advanced Independent Study and Honors.** THE DEPARTMENT.

Music

Professor

Elliott S. Schwartz

Associate Professors

Robert K. Greenlee

James W. McCalla, *Chair*

Assistant Professor

Jane C. Girdham**

Requirements for the Major in Music

The major in music consists of **Music 101** or exemption, **102, 201, 202; Music 301, 302; one** topics course (either **Music 351 or 361**); one year of ensemble performance studies; and one elective course in music.

Requirements for the Minor in Music

The minor in music consists of **Music 50, 101, 102**, one music elective at the 200 or 300 level, one year of ensemble performance studies, and one other elective in music.

All majors and minors are expected to complete at least one year of individual performance studies.

50c. Introduction to Western Music. Every year. Fall 1992.

THE DEPARTMENT.

For students with little or no previous training in music. Ability to read music or play an instrument is not necessary. The essentials of music—ways of organizing sound and time—are studied as they have been used in different periods and in the context of musical forms. Listening materials are drawn from a variety of sources: early Western music, Western music from the baroque through Romantic eras, and twentieth-century music.

101c. Theory I: Fundamentals of Music Theory. Every year. Fall 1992.

MR. McCALLA.

Music 101, while also an introductory course, deals with the structure rather than the literature of music. Course work and assignments stress the development of skills in music literacy (written and oral) and keyboard facility, and include many short quizzes and drills. In this regard, the course may be considered analogous to a beginning course in foreign language.

102c. Theory II: Diatonic and Chromatic Harmony I. Every year.

Spring 1993. MR. McCALLA.

Study of diatonic and chromatic harmony and of simple tonal forms, emphasizing analysis and part-writing of music from the late eighteenth and early nineteenth centuries. Three class hours plus one hour weekly in the musicianship skills laboratory.

Prerequisite: **Music 101** or equivalent.

121c. History of Jazz. Fall 1992. MR. McCALLA.

A survey of jazz from its African-American roots in the late nineteenth century to the present. Emphasis on musical characteristics—styles, forms, types of ensemble, important performers—with some attention to the

cultural and social position of jazz in this country and its interaction with other musics.

Music 131 through **139** are topics courses in specific aspects of music history and literature, designed for students with little or no background in music. Course titles and contents may change every semester.

131c. Studies in Music Literature: The Concerto. Spring 1993.

MR. SCHWARTZ.

A study of the concerto from its beginnings in the baroque era to the present, including an examination of the genre's unique dramatic and structural characteristics and its historical development. Concertos by Bach, Vivaldi, Mozart, Beethoven, Brahms, Liszt, Bartok, Prokofiev, Copland, and others are discussed.

133c. American Music. Fall 1992. MR. SCHWARTZ.

A historical study of American music, from its colonial origins to its present-day diversity. Includes such composers as William Billings, Amy Beach, Scott Joplin, and Charles Ives. Written work includes exams and brief reports based on attendance at concerts.

201c. Theory III: Counterpoint. Every year. Fall 1992. MS. GIRDHAM.

Practice in contrapuntal composition in eighteenth-century tonal styles.

Prerequisite: **Music 102**.

202c. Theory IV: Theory and Analysis of Late Chromatic and Twentieth-Century Music. Every year. Spring 1993. MR. SCHWARTZ.

Study and formal analysis of styles representing the late nineteenth and twentieth centuries, including compositions by Debussy, Ives, Mahler, Schoenberg, Stravinsky, Hindemith, Webern, Cage, Babbitt, and more recent composers.

Prerequisite: **Music 201**.

Music 301 and **302** are intended primarily for music majors and minors. **Music 102** is prerequisite or corequisite.

301c. Music History: Antiquity to 1750. Fall 1992. MS. GIRDHAM.

302c. Music History: 1750 to the Present. Spring 1993. MR. McCALLA.

361c. Topics in Music Theory: Orchestration. Fall 1992. MR. SCHWARTZ.

Transcription, arrangement, and free composition for ensembles of stringed, woodwind, and brass instruments, percussion, and piano, the primary aim being that of effective instrumentation. Intensive study of orchestral and chamber scores, drawn from the music literature.

Prerequisites: **Music 101, 102**.

PERFORMANCE STUDIES

Up to six credits of individual performance and ensemble courses together may be taken for graduation credit. Applied Performance Studies bear differing course numbers, depending on the semester of study.

235c–242c. Individual Performance Studies. Every year.

The following provisions govern applied music for credit:

1. Individual performance courses are intended for the continued study of an instrument with which the student is already familiar. Students must take at least two consecutive semesters of study on the same instrument to receive any credit.

2. Admission is by audition only. Only students who are intermediate or beyond in the development of their skills are admitted. Students may enroll only with the consent of the department.

3. Beginning with the second semester of lessons, students are expected to play in a Repertory Class midway through the semester, and must participate in Juries at the end of each semester.

4. To receive credit for Individual Performance Studies, the student must complete two other music credits *within the first two and a half years of study or by graduation, whichever comes first*. The student may choose these credits from any two of the following courses: **Music 50, 101, 102, 131-139, Orchestra (Music 261), Band (Music 221), Chamber Choir (Music 271), or Chorale (Music 251)**. *At least one of these courses must be started by the second semester of the first year of study. At least one course must not be an ensemble.*

5. One-half credit is granted for each semester of study.

6. The student pays a fee of \$210 for each semester of study; this fee is waived for music majors and minors. In some cases, the student may have to travel off campus to receive instruction. Instruction is offered as available on orchestral and chamber instruments for which a significant body of written literature exists.

Instructors include Julia Adams (viola), Betty Barber (trumpet), Naydene Bowder (piano and harpsichord), Neil Boyer (oboe), Judith Cornell (voice), Ray Cornils (organ and harpsichord), Kathleen Foster (cello), John Johnstone (guitar), Stephen Kecskemethy (violin), Margery Landis (French horn), David Libby (jazz piano), Mark Manduca (trombone and tuba), Deirdre Manning (flute), Shirley Mathews (piano), John Morneau (saxophone and clarinet), Martin Perry (piano), Karen Pierce (voice), and George Rubino (bass).

Ensemble Performance Studies. Every year.

221c–228c. Concert Band. MR. MORNEAU.

251c–258c. Chorale. MR. ANTOLINI.

261c–268c. Orchestra. MR. GREENLEE.

271c–278c. Chamber Choir. MR. GREENLEE.

281c–288c. Chamber Ensembles. THE DEPARTMENT.

The following provisions govern ensemble:

1. Students are admitted to an ensemble only with the consent of the instructor and, for those enrolled in chamber ensembles, upon the formation of a specific chamber group.

2. One-half credit is granted for each semester of study, and each student in the ensemble must be signed up for credit in the registrar's office.

3. Grade is Credit/Fail.

4. Ensembles meet regularly for a minimum of three hours weekly. Chamber ensembles are offered only as instruction is available.

5. All ensembles require public performance.

290c. Intermediate Independent Study. THE DEPARTMENT.

400c. Advanced Independent Study and Honors. THE DEPARTMENT.

Neuroscience

Administered by the Committee on Neuroscience

Associate Professors Patsy S. Dickinson and Guenter H. Rose, Chair*

Requirements for the Major in Neuroscience

I. Core Courses

A. Biology Courses:

Biology 101a, Introductory Cell Biology.

Biology 102a, Biology of Organisms and Populations.

Biology 203a, Comparative Neurobiology.

B. Psychobiology Courses:

Psychobiology 265a, Psychobiology.

Psychobiology 245a, Neuropsychology, *or*

Psychobiology 300a, Psychopharmacology.

C. Psychology Courses:

Psychology 101b, Introduction to Psychology.

Psychology 270b, Cognition, *or*

Psychobiology 230a, Perception.

D. Chemistry Courses:

Chemistry 225a, Elementary Organic Chemistry.

E. Statistics/Mathematics Courses:

Mathematics 75a, An Introduction to Statistics and Data Analysis, *or*

Psychology 250b, Statistical Analysis.

II. Additional Courses Required

In addition to the ten core courses, two courses are required from the lists below, at least one of which must be in biology.

A. Biology:

113a, Genetics and Molecular Biology.

114a, Comparative Physiology.

116a, Developmental Biology.

261a, Biochemistry I.

304a, Topics in Biochemistry and Molecular Biology.

305a, Neuroethology.

B. Psychobiology:

[200a, Comparative Psychology.]

230a, Perception.

245a, Neuropsychology.

300a, Psychopharmacology.

330a, Advanced Seminar: Current Trends and Controversies
in Psychobiology.

C. Psychology:

210b, Child Development.

260b, Abnormal Personality.

270b, Cognition.

271b, Language: A Developmental Perspective.

310b, Clinical Psychology.

361b, Cognitive Development.

[362b, Infancy.]

III. Recommended Courses

Philosophy 225c, The Nature of Scientific Thought.

Physics 103a, Mechanics and Matter.

Sociology 251b, Sociology of Health and Illness.

Philosophy

Professors

Denis J. Corish, *Chair*

C. Douglas McGee

Assistant Professors

Lawrence H. Simon

Dennis J. Sweet

Requirements for the Major in Philosophy

The major consists of eight courses, which must include **Philosophy 111** and **112**; at least two other courses from the group numbered in the 200s; and

two from the group numbered in the 300s. The remaining two courses may be from any level.

Requirements for the Minor in Philosophy

The minor consists of four courses, which must include **Philosophy 111** and **112** and one course from the group numbered in the 200s. The fourth course may be from any level.

First-Year Seminars

Enrollment is limited to 16 students for each seminar. First-year students are given first preference for the available places; sophomores are given second preference. If there are any remaining places, juniors and seniors may be admitted with consent of the instructor.

Topics change from time to time but are restricted in scope and make no pretense to being an introduction to the whole field of philosophy. They are topics in which contemporary debate is lively and as yet unsettled and to which contributions are often being made by more than one field of learning.

11c. Free Will. Spring 1994. MR. CORISH.

(See page 97 for a full description.)

[13c. Basic Problems in Philosophy.]

15c. Self and Self-Knowledge. Fall 1992. MR. CORISH.

(See page 98 for a full description.)

16c. Moral Problems. Fall 1992. MR. SIMON.

(See page 98 for a full description.)

Introductory Courses

51c. Philosophy and Poetry. Spring 1993. MR. CORISH.

What is poetry? What is its relation to philosophy, to science? We discuss such questions, using as texts both poems themselves and writings about poetry. We pay special attention to Plato, the most poetic of philosophers, and ask why he seems to condemn poetry.

52c. Literature as Philosophy. Spring 1993. MR. MCGEE.

After a presentation of the explicitly philosophical background of the literary works to be studied, the philosophic life-attitudes expressed in them are examined to determine their adequacy as philosophy and their relevance to conduct. The literature varies from time to time but always includes one major contemporary work and one major older work.

111c. Major Philosophers of the West: Beginnings to Christianity.

Fall 1992. MR. MCGEE. Fall 1993. MR. CORISH.

The sources and prototypes of Western thought. Emphasis on Plato and Aristotle, with some attention given to the pre-Socratic philosophers who

influenced them and to the Stoics and Epicureans. Medieval philosophy is more briefly considered, to show the interaction of Christianity and Greek thought.

112c. Major Philosophers of the West: Renaissance to Idealism.

Spring 1993. MR. CORISH. Spring 1994. MR. MCGEE.

Some attention is given to the philosophic grounds of the scientific revolution and to the intellectual and moral response the new scientific view of the world evoked from the philosophers. Reading in five or six of the following: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

Intermediate Courses

With the exception of **Philosophy 200**, intermediate courses are open to all students without prerequisite.

200c. Major Philosophers of the West: The Nineteenth Century.

Fall 1992. MR. SWEET.

A study of tendencies in the nineteenth century that have had an important influence on contemporary thought: the situation of philosophy after Kant; the development of idealism through Fichte, Schelling, and Hegel; the decline and fall of reason from Hegel to Schopenhauer and Kierkegaard; dialectical materialism, utilitarianism, and the origins of positivism.

Prerequisite: **Philosophy 112** or consent of the instructor.

221c. Ethics. Spring 1994. MR. SIMON.

Various types of answers to the questions What is right for me to do? What ought to be done? and What is the good life? are traced to their philosophical bases in historical and contemporary sources. The justification these bases provide is critically discussed, and some possible meanings of statements used to answer questions in morals are made explicit and compared.

222c. Political Philosophy. Fall 1993. MR. SIMON.

Examines some of the major issues and concepts in political philosophy, including political obligation and consent, freedom and coercion, justice, equality, and democracy. Readings from classical texts (Hobbes, Locke, Rousseau, Mill) as well as contemporary sources.

223a. Logic and Formal Systems. Spring 1994. MR. CORISH.

An introduction to the techniques and applications of twentieth-century deductive logic. After a consideration of the traditional approach, including the syllogism, the following topics are taken up: propositions, truth-functions, quantification theory, predicates, relations, natural deduction, and the properties of formal systems (consistency, completeness, etc.). No background in mathematics is presupposed.

224c. Pragmatism. Spring 1993. MR. MCGEE.

A study of the development of American pragmatism covering the works

of Pierce, James, Dewey, and Lewis. Topics include pragmatic theories, meaning, belief, and philosophical method.

225c. The Nature of Scientific Thought. Fall 1993. MR. CORISH.

A historical and methodological study of scientific thought as exemplified in the natural sciences. Against a historical background ranging from the beginnings of early modern science to the twentieth century, such topics as scientific inquiry, hypothesis, confirmation, scientific laws, theory, and theoretical reduction are studied. The readings include such authors as Gale, Kuhn, and Hempel.

226c. On Love. Fall 1992. MR. MCGEE.

An examination of philosophic attempts to analyze and clarify the cluster of concepts signaled by terms such as "love," "friendship," "charity," "agape," and "fellow-feeling." Readings are drawn from some of the following authors: Plato, Aristotle, St. Paul, St. Thomas, Spinoza, Schopenhauer, Nietzsche, Freud, Ortega y Gasset, and C. S. Lewis.

229c. Philosophy of Art. Spring 1993. MR. SWEET.

An investigation and evaluation of various philosophical theories of art, ancient and modern. Primary focus on tragic drama, since it combines many different artistic forms (e.g., visual, auditory, and poetic). Readings are taken from Aeschylus, Sophocles, Euripides, Plato, Aristotle, Lessing, Kant, Schelling, Nietzsche, and Sartre. Some attention is given to various musical and cinematic representations of tragic drama.

[231c. Existentialism.]

236c. Environmental Analysis: Political Philosophy and Policy.

Spring 1994 and Spring 1995. MR. SIMON.

Examines aspects of the environmental crisis, with special emphasis on political issues. Topics include our relation to and responsibility for nature in light of the present crisis; the adequacy of the conceptual and political resources of our tradition to address the crisis; and the interconnection of scientific, moral, political, and policy factors. (Same as **Environmental Studies 236.**)

258c. Environmental Ethics. Fall 1992 and Fall 1993. MR. SIMON.

The central issue in environmental ethics concerns what things in nature have moral standing and how conflicts of interest among them are to be resolved. Topics include an introduction to ethical theory, anthropocentrism, the moral status of nonhuman sentient things, preservation of endangered species and the wilderness, the moral status of nonsentient living things, holism versus individualism, and the land ethic. (Same as **Environmental Studies 258.**)

Advanced Courses

Although courses numbered in the 300s are advanced seminars primarily intended for majors in philosophy, adequately prepared students from other fields are also welcome. Besides the stated prerequisite, at least one of the courses from the group numbered in the 200s will also be found a helpful preparation.

331c. Plato. Spring 1994. MR. CORISH.

A study of some of the principal dialogues of Plato, drawn chiefly from his middle and later periods. The instructor selects the dialogues that will be read, but topics to be studied depend on the particular interests of the students.

Prerequisite: **Philosophy 111** or consent of the instructor.

332c. The Analytic Movement. Fall 1992. MR. SWEET.

An examination of the methods and developments of analytical philosophy from the last decades of the nineteenth century to the present. Topics include the problems of identity; the ontological status of complexes; the problem of universals; the debate concerning nonexistent objects; and the relationship between language and the world.

Prerequisite: **Philosophy 112** or consent of the instructor.

335c. The Philosophy of Aristotle. Fall 1992. MR. CORISH.

A textual study of the basics of Aristotle's philosophy. Aristotle's relationship to Plato, his criticism of the Platonic doctrine of Forms, and Aristotle's own doctrines of substance, causation, actuality, potentiality, form, and matter are discussed. Some of the Aristotelian disciplines of logic, physics, metaphysics, psychology, and moral philosophy are examined in terms of detailed specific doctrines, such as that of kinds of being, the highest being, the soul, and virtue.

Prerequisite: **Philosophy 111** or consent of the instructor.

336c. Spinoza's Ethics. Spring 1993. MR. MCGEE.

A detailed study of the text of Spinoza's major work, *The Ethics*.

Prerequisite: **Philosophy 111** and **112**.

[337c. Hume.]

[338c. Kant.]

340c. Contemporary Ethical Theory. Spring 1993. MR. SIMON.

Examines debates in recent ethical theory, including cognitivism versus non-cognitivism, naturalism versus non-naturalism, realism versus anti-realism, the relation of ethics to science, and the anti-theory and feminist critiques of universalist ethics.

Prerequisite: **Philosophy 112** or consent of the instructor.

341c. Twentieth-Century Continental Philosophy. Spring 1993.

MR. SWEET.

Examines some of the most important developments in twentieth-century Continental philosophy in general, and in phenomenology in particular. Focus on the views of Brentano, Husserl, Heidegger, Bergson, and Sartre concerning the issues of intentionality, ontology, space and time, psychology, and the philosophy of mind.

Prerequisite: **Philosophy 112** or consent of the instructor.

392. Advanced Topics in Environmental Philosophy. Spring 1993.

MR. SIMON.

Topics may include conservation and our obligation to future generations; individualism, holism, and the construction of the moral community; normative aspects of policy formation; and philosophical problems concerning technology. (Same as **Environmental Studies 392.**)

Enrollment limited to 15 students. Preference given to senior philosophy and environmental studies majors.

290c. Intermediate Independent Study. THE DEPARTMENT.**400c. Advanced Independent Study and Honors.** THE DEPARTMENT.

Physics and Astronomy

*Professors*Guy T. Emery, *Chair*

William T. Hughes†

Elroy O. LaCasce, Jr.

Associate Professors

Dale Syphers

James H. Turner

Visiting Instructor

Mark Hinline

Teaching Associate

David L. Roberts

Requirements for the Major in Physics

The major program depends to some extent on the student's goals, which should be discussed with the department. Those who intend to do graduate work in physics or an allied field should plan to do an honors project. For those considering a program in engineering, consult page 30. A major student with an interest in an interdisciplinary area such as geophysics, biophysics, or oceanography will choose appropriate courses in related departments. Secondary school teaching requires a broad base in science courses, as well as the necessary courses for teacher certification. For a career in industrial management, some courses in economics and government should be included.

In any case, a major in physics is expected to complete **Mathematics 161, 171, Physics 103, 223, 227, 228**, and four more approved courses, one of which may be **Mathematics 181** or above. For honors work, a student is expected to complete **Mathematics 181**, and **Physics 103, 223, 227, 228, 300, 310, 450**, and four more courses, one of which may be in mathematics above **181**. Students interested in interdisciplinary work may, with permission, substitute courses from other departments. **Geology 265, Geophysics**, is an approved physics course.

Requirements for the Minor in Physics

The minor consists of at least four Bowdoin courses numbered **103** or higher, at least one of which is from the set of **Physics 223, 227, and 228**.

Interdisciplinary Majors

The department participates in interdisciplinary programs in chemical physics, and geology and physics. See pages 124–25.

CORE COURSES

(See also **Adjunct Courses**, page 146.)

103a. Mechanics and Matter. Every semester. Fall 1992. MR. EMERY. Spring 1993. MR. SYPHERS.

Covers the fundamental constituents of matter, conservation laws, and forces and interactions from subatomic to molecular to macroscopic systems. Intended to give a broad overview of physics, introducing both classical and modern concepts. Three hours of laboratory work per week.

Prerequisite: Previous credit or concurrent registration in **Mathematics 161**. Students who have taken or who are taking **Chemistry 251** will not receive credit for this course. Open only to first- and second-year students in the fall.

223a. Electric Fields and Circuits. Every spring. Spring 1993. MR. TURNER.

The basic phenomena of the electromagnetic interaction are introduced. The basic relations are then specialized for a more detailed study of linear network theory. Laboratory work stresses the fundamentals of electronic instrumentation and measurement. Three hours of laboratory work per week.

Prerequisites: A grade of at least C in **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

227a. Waves and Quanta. Every fall. Fall 1992. MR. LACASCE.

Wave motion occurs in many areas of physics. A discussion of basic wave behavior and the principle of superposition leads to a study of wave propagation and its relationship to coherence, interference, and diffraction. The wave model of the atom provides an introduction to atomic spectra. The laboratory work provides experience with optical methods and instruments.

Prerequisites: A grade of at least C in **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

228a. Modern Physics. Every spring. Spring 1993. MR. SYPHERS AND MR. EMERY.

An introduction to the basic concepts and laws of nuclear and particle physics, covering the principles of relativity and quantum theory, particle accelerators, nuclear structure and reactions, and the behavior of elementary

particles. The physics of radioactivity and the biological, medical, and ecological applications of radiation are given special emphasis through weekly laboratory exercises with radioactive materials and nuclear instrumentation. Three hours of laboratory work per week.

Prerequisites: A grade of at least C in **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

229a. Statistical Physics. Every other fall. Fall 1993.

The course develops a framework capable of predicting the properties of systems with many particles. This framework, combined with simple atomic and molecular models, leads to an understanding of such concepts as entropy, absolute temperature, and the canonical distribution. Some probability theory is developed as a mathematical tool.

Prerequisites: A grade of at least C in **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

300a. Methods of Theoretical Physics. Every spring. Spring 1993.

MR. LACASCE.

Mathematics is the language of physics. Similar mathematical techniques occur in different areas of physics. A physical situation may first be expressed in mathematical terms, usually in the form of a differential or integral equation. After the formal mathematical solution is obtained, the physical conditions determine the physically viable result. Examples are drawn from heat flow, gravitational fields, and electrostatic fields.

Prerequisites: **Mathematics 181** or **223**, and **Physics 223**, **227**, or **228**, or consent of the instructor.

310a. Introductory Quantum Mechanics. Every fall. Fall 1992.

MR. TURNER.

An introduction to quantum theory, solutions of Schrodinger equations, and their applications to atomic systems.

Prerequisites: **Physics 227** and **300**.

320a. Electromagnetic Theory. Every other fall. Fall 1993.

First the Maxwell relations are presented as a natural extension of basic experimental laws; then emphasis is given to the radiation and transmission of electromagnetic waves.

Prerequisites: **Physics 223** and **300**, or consent of the instructor.

350a. Solid State Physics. Every other spring. Spring 1994.

The physics of solids, including crystal structure, lattice vibrations, and energy band theory.

Prerequisite: **Physics 310**.

370a. Advanced Mechanics. Every other fall. Fall 1992. MR. TURNER.

A thorough review of particle dynamics, followed by the development of Lagrange's and Hamilton's equations and their applications to rigid body motion and the oscillations of coupled systems.

Prerequisite: **Physics 300** or consent of the instructor.

380a. Elementary Particles and Nuclei. Every other spring. Spring 1993. MR. EMERY.

The phenomenology of elementary particles and of nuclei, their structure and interactions, the application of symmetry principles, and the experimental methods used in these fields.

Prerequisite: **Physics 310.**

400a. Advanced Independent Study. THE DEPARTMENT.

Topics to be arranged by the student and the staff.

Prerequisite: Normally, a previous physics course at the 300 level.

450a. Honors. THE DEPARTMENT.

Programs of study are available in semiconductor physics, microfabrication, superconductivity and superfluidity, the physics of metals, general relativity, biophysics, and nuclear physics. Work done in these topics normally serves as the basis for an honors paper.

Prerequisite: **Physics 310.**

ADJUNCT COURSES

62a. Contemporary Astronomy. Spring 1993. MR. ROBERTS.

A generally qualitative discussion of the nature of stars and galaxies, stellar evolution, the origin of the solar system and its properties, and the principal cosmological theories. Enrollment limited to 50 students. Students who have taken or who are taking **Physics 103** will not receive credit for this course.

63a. Physics of the Twentieth Century. Every fall. MR. HINELINE.

Explores the growth of twentieth-century physics, its institutions, and its relationship to modern statecraft. Topics include knowledge-making in experimental and theoretical physics, the role of physics in national security and national prestige, the difficulty in distinguishing between “pure” and “applied” science, and the boundaries between physics and the other sciences.

Prerequisite: Ordinary secondary school mathematics. Enrollment is limited to 50 students. Students who have taken or who are taking **Physics 103** will not receive credit for this course.

240a. Digital Electronics. Every other fall. Fall 1992. MR. SYPHERS.

An introduction to the basic principles of binary circuits and digital electronics. Topics include Boolean algebra and logic circuitry, binary numbers and computation, memory circuits and information storage, digital/analog conversion, and circuits for timing and control. The structure of digital instruments, calculators, and computers is covered as time permits. Laboratory work with digital integrated circuits.

Prerequisite: A grade of at least C in **Physics 103.**

250a. Topics in Physics: Physical Acoustics. Spring 1994. MR. LACASCE.

An introduction to wave motion and wave propagation; the techniques and problems of physical acoustical measurements and their relation to the ear and hearing. Selected topics include noise and the control of noise, architectural acoustics, and normal modes.

Prerequisites: A grade of at least C in **Physics 103**, and **Mathematics 161**.

255a. Physical Oceanography. Spring 1993. MR. LACASCE.

The aim is to provide a feel for the scope of physical oceanography. Among the topics covered are tidal theory, surface and internal waves, and the heat budget and its relation to the oceanic circulation. Some attention is given to the problems of instrumentation and the techniques of measurement.

Prerequisites: A grade of at least C in **Physics 103**, and **Mathematics 161**.

[260a. Biophysics.]**262a. Astrophysics.** Every fall. MR. ROBERTS.

A quantitative discussion that introduces the principal topics of astrophysics, including stellar structure and evolution, planetary physics, and cosmology.

Prerequisite: A grade of at least C in **Physics 103**.

290a. Intermediate Independent Study. THE DEPARTMENT.

Topics to be arranged by the student and the staff. If the investigations concern the teaching of physics, this course may satisfy certain of the requirements for the Maine State Teacher's Certificate.

Prerequisite: Normally, a previous physics course at the 200 level.

Psychology

Professors

Alfred H. Fuchs

Barbara S. Held†

Associate Professors

Gunter H. Rose, *Director of the Psychobiology Program*

Paul E. Schaffner

Melinda Y. Small, *Chair*

Assistant Professor

Suzanne B. Lovett

Visiting Assistant Professor

Nancy Snyder

The Department of Psychology comprises two programs: psychology and psychobiology. Students may elect a major within the psychology program, or they may elect an interdisciplinary major in neuroscience, sponsored jointly by the psychobiology program and the biology department (see Neuroscience, pages 137–38). The program in psychology examines contemporary perspectives on principles of human behavior, in areas ranging from cognition, language, and neurophysiology to interpersonal relations,

psychopathology, and problem solving. Its approach emphasizes scientific methods of inquiry and analysis. The program in psychobiology examines the interrelations among biological, psychological, and environmental factors in the study of normal and abnormal behavior.

Requirements for the Major in Psychology

The psychology major includes a total of nine courses numbered 100 or above. These courses are selected by students with their advisors and are subject to departmental review. The nine courses include **Psychology 101**, **Psychology 250** (taken during the sophomore year if possible), and four courses numbered above 250, one of which must be numbered 300-399. Two psychology laboratory courses numbered 260-279 must be taken after statistics and, if possible, before the senior year. At least one laboratory course must be numbered 270-279. Majors are encouraged to consider an independent study course on a library, laboratory, or field research project during the senior year. Any one or two of the following psychobiology courses may count toward the nine-course requirement for the psychology major, but not toward the laboratory or advanced course requirement: **200, 230, 245, 265, 300, and 330.**

Requirements for the Minor in Psychology

The psychology minor consists of five courses numbered 100 or above, including **Psychology 101**, **Psychology 250**, and one psychology laboratory course numbered 260-279. Any one of the following psychobiology courses may be included in the psychology minor: **200, 230, 245, 265, 300, and 330.**

Students who are interested in teaching as a career should consult with the Department of Education for courses to be included in their undergraduate program. Ordinarily, students of education will find much of relevance in **Psychology 210, 214, 270, and 361**; these courses cover the topics usually included in educational psychology. In addition, prospective teachers may find **Psychology 211, 212, 271, and 320** compatible with their interests and helpful in their preparation for teaching.

Requirements for the Major in Neuroscience

See Neuroscience, pages 137-38.

COURSES IN PSYCHOLOGY

Introductory Course

101b. Introduction to Psychology. Every semester. THE DEPARTMENT.

A general introduction to the major concerns of contemporary psychology, including psychobiology, perception, learning, cognition, language, development, personality, intelligence, and abnormal and social behavior.

Recommended for first- and second-year students. Juniors and seniors should enroll in the spring semester.

Intermediate Courses

210b. Child Development. Every spring. Ms. LOVETT.

A survey of major changes in psychological functioning from conception through adolescence. Several theoretical perspectives are used to consider how physical, personality, social, and cognitive changes jointly influence the developing child's interactions with the environment.

Prerequisite: **Psychology 101.**

211b. Personality. Every fall. Ms. SNYDER.

A comparative survey of theoretical and empirical attempts to explain personality and its development. The relationships of psychoanalytic, interpersonal, humanistic, and behavioral approaches to current research are considered.

Prerequisite: **Psychology 101.**

212b. Social Psychology. Every spring. MR. SCHAFFNER.

A survey of theory and research on psychological aspects of social behavior. Topics include conformity, language and communication, attitudes, prejudice and racism, social epistemology, interpersonal relationships, and group conflict. Class research projects supplement readings and lectures.

Prerequisite: **Psychology 101 or Sociology 101.**

213b. Adult Development and Aging. Every fall. MR. FUCHS.

An examination of research and theory relevant to the understanding of the changes that occur from early adulthood to later years. Particular emphasis is placed on issues in the research on aging and changes in individual functioning associated with age.

Prerequisite: **Psychology 101.**

214b. Learning and Behavior. Every fall. MR. FUCHS.

Examines the methodologies, phenomena, and theories of classical and operant conditioning and current research on animal cognition.

Prerequisite: **Psychology 101.**

222b. Law and Psychology. Every other year. Spring 1995. Ms. HELD.

Presents topic areas where there is an interface between psychological and legal issues. The first half of the course emphasizes how psychologists can study and aid the legal process. The second half emphasizes the special concerns of the mental health professional within the legal system.

Prerequisite: **Psychology 101.** Enrollment limited to 30 students. No first-year students admitted.

225b. Organizational Behavior. Every spring. MR. SCHAFFNER.

Examines the experience of work in modern human organizations through readings and discussion on six themes: psychological aspects of work within

organizations; the subjective experience of work; personality, emotive, and cognitive aspects of work; interpersonal influence, communication, and group dynamics; problem recognition and decision making; and the enactment of organizational change.

Prerequisites: **Psychology 101** and junior or senior standing.

250b. Statistical Analysis. Every fall. Ms. LOVETT.

An introduction to the use of descriptive and inferential statistics and design in behavioral research. Weekly laboratory work in computerized data analysis. Required of majors no later than the junior year, and preferably by the sophomore year.

Prerequisite: **Psychology 101** or consent of the instructor.

260b. Abnormal Personality. Every spring. Ms. SNYDER.

A general survey of the nature, etiology, diagnosis, and treatment of common patterns of mental disorders. The course may be taken for one of two purposes:

Section A. Laboratory course credit.

Prerequisites: **Psychology 211** and **Psychology 250**. Enrollment limited to 14 students, who will participate in a supervised practicum at a local psychiatric unit.

Section B. Non-laboratory course credit.

Prerequisite: **Psychology 211**. Participation in the practicum is optional, contingent upon openings in the program.

270b. Cognition. Every fall. MRS. SMALL.

An analysis of research methodology and experimental investigations in cognition, which includes attention, memory, comprehension, thinking, and problem solving. Laboratory work, including experimental design.

Prerequisites: **Psychology 101** and **250**.

271b. Language: A Developmental Perspective. Every spring. Ms. LOVETT.

Major aspects of how we produce and understand language are considered by examining research and theory concerning how language develops in both normal and atypical populations and how early language is similar to or different from adult language. Students design and execute research projects in weekly laboratory work.

Prerequisites: **Psychology 101, 210, and 250**, or consent of the instructor.

272b. Research in Social Behavior. Every fall. MR. SCHAFFNER.

A laboratory course on research design and methodology in social and personality psychology, focusing on a topic of current theoretical importance. Students plan and carry out original research.

Prerequisites: **Psychology 211** or **212**, and **250**.

Advanced Courses

300b. Topics in Psychology: Motivation. Spring 1993. MR. FUCHS.

An examination of current theories and research results in the study of motivation.

Prerequisites: **Psychology 101** and two additional courses, or consent of the instructor.

310b. Clinical Psychology. Every fall. MS. SNYDER.

The history and development of clinical psychology, including an emphasis on current controversies regarding ethical and legal issues. Major portions of the course are devoted to theory and research concerning psychological assessment and types of psychotherapies.

Prerequisite: **Psychology 260**.

311b. History of Psychology. Spring 1994. MR. FUCHS.

An examination of the historical development of the methods, theories, and data of psychology as it has emerged as a field of inquiry, an academic discipline, and a profession in the past 150 years.

Prerequisites: At least three courses in psychology beyond the introductory level, or consent of the instructor.

320b. Social Development. Every other year. Fall 1993. MS. LOVETT.

The development of social behavior and social understanding from infancy to early adulthood. Emphasis on empirical research and related theories of social development. Topics include the development of aggression, altruism, morality, prejudice and racism, sex-role stereotypes and sex-appropriate behavior, and peer relationships, as well as the impact of parent-child relationships on social development.

Prerequisites: **Psychology 210** and **250**.

323b. Political Psychology. Every other year. Fall 1992. MR. SCHAFFNER.

An analysis of psychological aspects of political behavior, considering both prominent figures and the general public. Topics include the psychological foundations of politics; ideology and structure of belief systems; activism and alienation; political socialization; power tactics; the rationality of political choice; leadership; social change; and psychobiography.

Prerequisites: At least three courses in psychology beyond the introductory level, including either **Psychology 211** or **212**.

361b. Cognitive Development. Every spring. MRS. SMALL.

The development of mental representation and cognitive processes from infancy to early adulthood. Emphasis on experimental research and related theories of cognitive development, especially on the development of perception, memory, learning, comprehension, thinking, and problem solving.

Prerequisites: **Psychology 250**, and **Psychology 210** or **270**.

[362b. Infancy.]

290b. Intermediate Independent Study.

400b. Advanced Independent Study and Honors.

COURSES IN PSYCHOBIOLOGY

50a. Mind and Brain: Historical and Contemporary Issues. Every other year. Fall 1992. MR. ROSE.

What are the influences now and in the past that determine an accepted view of the biological basis of "human nature"? This course examines the interaction of historical, philosophical, sociopolitical, technological, and personal factors that preceded and led to modern views of our normal and abnormal behaviors. Contemporary issues include an analysis of genetics and behavior; psychopharmacology; biological explanations of crime, mental illness, sexual preferences, etc.; bias in biology and its role in determining social policy; and cross-cultural comparisons between Western and Eastern illness and treatment systems.

60a. Drugs, Behavior, and Human Society. Every other fall. Fall 1993. MR. ROSE.

An introductory survey of psychoactive drugs and plants, toxins, food additives, and other chemicals that alter human behavior as used in various cultures. Following a historical introduction and an overview of drug action mechanisms, each chemical group is discussed from the following perspectives: history of use, specific modes of action, physical and psychological effects, reasons for use (religious, recreational, industrial, etc.), cultural influences, and potential hazards and treatments. Topics include alcohol and other depressants, cocaine and other stimulants, psychedelics and hallucinogens, psychotherapeutics, medicinal plants, drugs and sports, drugs in food and food as drugs, environmental toxins, and contraceptives.

[200b. Comparative Psychology.]

230a. Perception. Every other spring. Spring 1993. MR. ROSE.

A survey of the basic phenomena and problems of perception and sensory psychology. Topics include psychophysics; coding of qualities such as color, form, pitch, touch, pain; the influence of early experience, attention, individual differences, culture, and altered states of consciousness; and an examination of abnormal perceptions (dyslexia, aphasia, etc.), including their diagnosis and treatment.

Prerequisite: **Psychology 101.**

245a. Neuropsychology. Every other fall. Fall 1992. MR. ROSE.

An in-depth survey of experimental and clinical approaches in the study of brain-behavior relationships of higher processes, in normal and brain-damaged humans. Topics include assessment of normal sensory-motor, attentional, memory, and language functions by behavioral and neurophysiological techniques; higher-function changes during development and with

aging; the sensory-motor and cognitive effects of damage to specific regions of the brain; clinical studies as a clue to normal functions; and Asian versus Western approaches to structure and function of higher processes.

Prerequisite: **Psychology 101** or **Biology 101**.

265a. Psychobiology. Every spring. Spring 1992. MR. ROSE.

The biological correlates of behavior, with special emphasis on the neurosciences. Topics include neurophysiology, psychopharmacology, perceptual systems, brain mechanisms in sleep and wakefulness, normal and abnormal emotional behaviors, learning, memory, and higher functions, as well as the neuropsychology of brain-damaged individuals. Ethical and political implications of neuroscience are also discussed. Laboratory experience emphasizes human electrophysiological recordings, including central (EEG, evoked potentials), peripheral (EMG), and autonomic nervous system (EKG, etc.) measures.

Prerequisite: **Psychology 101** or **Biology 101**.

300a. Psychopharmacology. Every other spring. Spring 1994. MR. ROSE.

An advanced study of psychoactive drugs, their neural mechanisms of action, and their effects on animal and human behavior. Topics include experimental techniques in psychopharmacology; neuropharmacology; and the analysis of the interactive effects of neurotransmitters and drugs on behavior. This is followed by an in-depth analysis of depressants, stimulants, narcotic analgesics, antipsychotics, and psychedelics; drug addiction and treatment; ethnopharmacology, emphasizing nontraditional or non-Western medicinal/ritualistic uses of organic and inorganic substances; and implications of drug effects for neurochemical theories of behavior.

Prerequisites: **Psychobiology 265**, **Biology 114**, or **Biology 203**, and consent of the instructor.

330a. Advanced Seminar: Current Trends and Controversies in Psychobiology. Fall 1993. MR. ROSE.

Considers current theoretical and research issues in selected areas of behavioral neuroscience. Emphasis is on critical evaluations of recent literature. Students are responsible for co-facilitating discussion, and organize a detailed critique of a selected topic area for an oral presentation and a related term paper.

Prerequisites: An upper-level (200-level or above) course in psychobiology/neuroscience and consent of the instructor.

290a. Intermediate Independent Study. THE DEPARTMENT.

400a. Advanced Independent Study and Honors. THE DEPARTMENT.

Religion

Professors

John C. Holt**, *Chair (fall semester)*
Burke O. Long, *Chair (spring semester)*

Assistant Professor

Irena S. M. Makarushka
Visiting Assistant Professor
Deborah A. Soifer

The Department of Religion offers students opportunities to study the major religions of the world, East and West, ancient and modern, from a variety of academic viewpoints and without sectarian bias.

Each major is assigned a departmental advisor who assists the student in formulating a plan of study in religion and related courses in other departments. The advisor may also provide counsel in vocational planning and graduate study.

Requirements for the Major in Religion

The major consists of at least nine courses in religion approved by the department. Required courses include **Religion 101** (Introduction to the Study of Religion), **Religion 102** (Asian Religious Thought; same as **Asian Studies 101**), and **Religion 103** (Introduction to Western Religious Thought); two courses at the 200 level in Western or Asian religions; and one advanced topics seminar numbered 390 or higher.

No more than four courses below the 200 level, including one first-year seminar, may be counted toward the major. **Religion 101**, **102**, or **103** normally should be taken by the end of the sophomore year. Concurrent enrollment among these three courses is permissible. In order to enroll in the 390-level seminar, a major normally will be expected to have taken five of the nine required courses. This seminar is also open to qualified nonmajors with permission of the instructor.

Interdisciplinary Major

The department participates in an interdisciplinary program in art history and religion. See page 123.

Independent Study

A student proposing to undertake an independent study project under the supervision of a faculty member of the department must submit, not later than April 1 or November 1 of the semester *before* he or she wishes to pursue the project, a plan for it on a form to be obtained from the department. The department faculty will review applications and only on the basis of its approval may the project be undertaken. This regulation also applies to honors proposals.

Honors in Religion

Students contemplating honors candidacy should possess a record of distinction in departmental courses, including those that support the project, a

clearly articulated and well-focused research proposal, and a high measure of motivation and scholarly maturity. It is recommended that such students incorporate work in the majors' seminar (**Religion 390**) as part of their honors project or complete *two semesters* of independent study in preparing research papers for honors consideration.

Requirements for the Minor in Religion

A minor consists of five courses—**Religion 101**, two intermediate-level (200) courses from a core area, and two more courses at the 200 level or higher. Among these electives beyond **Religion 101**, at least one course shall be in Western religions and one in Asian religions.

First-Year Seminars

These courses are introductory in nature, focusing on the study of a specific aspect of religion, and may draw on other fields of learning. They are not intended as prerequisites for more advanced courses in the department unless specifically designated as such. They include readings, discussions, reports, and writing. Topics change from time to time to reflect emerging or debated issues in the study of religion.

Enrollment is limited to 16 students for each seminar. First-year students are given priority for available spaces. Seminars may be repeated for credit with the contents changed.

10c. Adam and Eve and the Moral of the Story. Fall 1992.

Ms. MAKARUSHKA.

(See page 98 for a full description.)

11c. The Book of Job. Spring 1993. MR. LONG.

(See page 98 for a full description.)

Introductory Courses

101c. Introduction to the Study of Religion. Fall 1992. MR. HOLT.

Fall 1993. MR. LONG.

Basic concepts, methods, and issues in the study of religion, with special reference to examples comparing and contrasting Eastern and Western religions. Lectures, discussions, and readings in classic texts and modern interpretations.

102c,d. Asian Religious Thought. Fall 1992. Ms. SOIFER.

Examines basic principles, themes, and conflicts in the religio-cultural thought of Asian civilizations, primarily through the study of classical texts of India, China, and Japan. A broadly comparative focus on these issues is applied to such texts as the *Bhagavad Gita*, the *Analects* of Confucius, and the works of the Taoist philosophers Lao-tzu and Chuang-tzu. (Same as **Asian Studies 101**.)

103c. Introduction to Western Religious Thought. Spring 1993. Ms. MAKARUSHKA.

A study of individual and communal religious experiences expressed in genres including dialogue, autobiography, sacred scripture, treatise, mystical writing, poetry, and artworks. Focus on the historical and cultural contexts that give rise to specific notions of virtue, wisdom, and holiness.

Intermediate Courses

[200c. Judaism.]

201c. Christianity. Spring 1994. MR. LONG.

The varieties of Christian experience and expression; patterns and structures of Christian life such as conversion, creed, ritual dramas, and church. Attention is paid to historical developments, continuities, and change, as well as to modern realities of particular import for Christianity, such as cultural pluralism, disbelief, and liberationist movements.

Prerequisite: Any 100-level course in religion, or consent of the instructor.

202c. Jewish Origins. Fall 1992. MR. LONG.

A study of the ways in which Jews interacted with one another and non-Jews in the Graeco-Roman world and created the foundations for Judaism of modern times. Considers paradigmatic texts that shaped early Jewish thought and practice, and still influence scholarly investigations of Jewish origins. Analysis of primary sources, including the Bible, along with modern interpretations.

Prerequisite: Any 100-level course in religion, or consent of the instructor.

203c. Christian Origins. Spring 1993. MR. LONG.

A study of the varieties of Christian expression in relation to other cultures of the Graeco-Roman world. Considers paradigmatic texts that shaped early Christian thought and practice, and continue to influence modern investigations of Christian beginnings. Analysis of primary sources along with modern interpretations.

Prerequisite: Any 100-level course in religion or consent of the instructor.

[204c. The Bible in Literary Focus.]

(Same as English 103.)

[205c. Judaism, Christianity, and Antisemitism.]

(Same as History 220.)

206c. Greek Religion. Spring 1993. MR. D. NEEL SMITH.

(Same as Classics 203.)

220c,d. Religion in Ancient India. Fall 1994. MR. HOLT.

Analytic study of religious thought and practice in the formative period of Hinduism as these are reflected in the *Vedas*, the *Upanishads*, the *Yoga Sutras*, the *Bhagavad Gita*, and the theological and philosophical expositions of Sankara and Ramanuja. (Same as Asian Studies 240.)

221c,d. Religion in Medieval and Modern India. Spring 1995. MR. HOLT.

Critical study of the popular character of traditional devotional Hinduism as it emerges in the mythologies of the *Puranas*, in iconography, and in the poetry and songs of the *sant* traditions of medieval India. Concomitant consideration of Islam and the emergence of the Sikh tradition, culminating in a study of the nineteenth- and twentieth-century "Hindu renaissance." (Same as **Asian Studies 241.**)

Prerequisite: **Religion 220** recommended.

222c,d. Buddhist Thought. Fall 1992. MR. HOLT.

Examines principal categories of Buddhist religious thought as they arise in representative genres of Buddhist literature, especially the Sanskrit *Sutras* of Mahayana tradition. (Same as **Asian Studies 242.**)

Prerequisite: **Religion 101** or **102**, or consent of the instructor.

[223c,d. Buddhism, Culture, and Society.]

(Same as **Asian Studies 243.**)

226c,d. Epic and Mythic Traditions of India. Spring 1993. MS. SOIFER.

Explores the Sanskritic epic and mythic literature of classical Hinduism. Study of the *Mahabharata* and *Ramayana* epics, with emphasis on religious themes. Reading of original myths from the *Puranas*, with attention to themes of cosmology, conflict, divine manifestation, and soteriology, as well as concepts of evil and sexuality. Some discussion of methodology in the study of mythology. (Same as **Asian Studies 246.**)

Prerequisite: **Religion 102/Asian Studies 101** or consent of the instructor.

250c. Western Religion and Its Critics. Spring 1993. MS. MAKARUSHKA.

Modern challenges to the Western religious tradition, such as Hume, Darwin, Feuerbach, Marx, Nietzsche, Freud, and liberation theologies, including feminism.

Prerequisite: **Religion 101** or **103**, or consent of the instructor.

251c. The Problem of Evil. Fall 1992. MS. MAKARUSHKA.

Explores Western myths and symbols of evil that express the experience of defilement, sin, guilt, and suffering as disclosed in a wide range of religious, philosophical, and literary texts and films. Reflection on questions concerning the existence of God, human finitude, and the cultural construction of normative values.

252c. Religions in America. Fall 1994. MS. MAKARUSHKA.

A critical assessment of religious traditions and their impact on the development of American cultures and values. Religious experiences to be explored include Native American and African-American traditions; representative forms of Judaism, Christianity, and Islam; Asian religions, civil religion, women's religions, and utopian communities.

253c. Religion, Women, and Nature. Fall 1993. Ms. MAKARUSHKA.

Explores the relationship between religion, Western attitudes toward nature, and women's experience. Questions the underlying assumptions that determine the cultural definitions of creation, human nature, and the natural world. Feminist and ecofeminist writings provide the basis for rethinking the traditional view that women are associated with nature and men with culture. Questions concerning the interdependence of nature and culture, the attitudes of domination and participation, and the ethics of power are raised.

Advanced Courses

The following courses study in depth a topic of limited scope but major importance, such as one or two individuals, a movement, type, concept, problem, historical period, or theme. Topics change from time to time. Courses may be repeated for credit with the contents changed.

390c. Sacred Texts in Comparative Perspective. Fall 1992. MR. LONG.

A study of how sacred texts are used and understood in their specific cultural settings. Explores the diversity of form (oral, written, and visual), fluidity of boundary (open and closed canons, canons within canons), and multiplicity of interpretative strategies through which indigenous scholars as well as outsiders explain and translate received tradition to their contemporaries. Case studies drawn from Western and Eastern cultures, along with readings in various theories of interpretation.

Prerequisites: **Religion 101** and any 200-level course in religion, or consent of the instructor.

290c. Intermediate Independent Study. THE DEPARTMENT.**400c. Advanced Independent Study and Honors.** THE DEPARTMENT.

Romance Languages

Professors

Clifford R. Thompson

John H. Turner

Associate Professors

Robert R. Nunn

Françoise Dupuy Sullivan†

William C. VanderWolk, *Chair**Assistant Professors*

Karin Dillman

Janice A. Jaffe

Lecturer

Rosa Pellegrini

Visiting Lecturer

Marie-Joséphé Silver

Teaching Fellows

Javier García Durán

Franck Le Gac

The Department of Romance Languages offers courses in French, Spanish, and Italian language and literature. Native speakers are involved in most language courses. Literature courses are conducted in the respective language.

Study Abroad

A period of study in an appropriate country, usually in the junior year, is strongly encouraged for all students of language. Bowdoin College is affiliated with a wide range of programs abroad, and interested students should seek the advice of a member of the department early in their sophomore year.

Independent Study

This is an option primarily intended for students who are working on honors projects. It is also available to students who have taken advantage of the regular course offerings and wish to work more closely on a particular topic. Independent study is not an alternative to regular course work. An application should be made to a member of the department prior to the semester in which the project is to be undertaken and must involve a specific proposal in an area in which the student can already demonstrate knowledge.

Honors in Romance Languages

Majors may elect to write an honors project in the department. This involves two semesters of independent study in the senior year and the writing of an honors essay and its defense before a committee of members of the department. Candidates for department honors should also have a strong record in other courses in the department.

Requirements for the Major in Romance Languages

The major consists of eight courses more advanced than **French 204** or **Spanish 204**. The major may consist entirely of courses in either French or Spanish, or it may involve a combination of courses in French and Spanish. It is expected that majors who are not writing an honors project will enroll in a topics course in their senior year. No more than two courses may be in independent study, and no fewer than four Bowdoin courses should be taken. Prospective majors are expected to have completed **French** or **Spanish 205** and **209** before the end of their sophomore year.

Requirements for the Minor in Romance Languages

The minor consists of three Bowdoin courses in one language above 204.

Placement

Students who plan to take French or Spanish must take the appropriate placement test at the beginning of the fall semester.

FRENCH

101c, 102c. Elementary French. Every year. Fall 1992. Ms. SILVER.
Spring 1993. Ms. SILVER.

A study of the basic forms, structures, and vocabulary. Emphasis on

listening comprehension and spoken French. During the second semester, more stress is placed on reading and writing. Three hours per week, plus regular language laboratory assignments and conversation sessions.

Prerequisite: **French 101** is open to first- and second-year students who have had two years or less of high school French. Juniors and seniors wishing to take **French 101** must have the consent of the instructor.

119c. Seminars for First- and Second-Year Students.

The Modern French Short Story. Fall 1992. MR. NUNN.

Examines the development of the French short story in the nineteenth and twentieth centuries. Authors to be studied include Balzac, Sand, Nerval, Flaubert, Mérimée, Colette, Sartre, Camus, and Yourcenar. Intended for first-year students who have taken the French Literature AP. Seminar format allows maximum oral participation.

203c. Intermediate French I. Every fall. Fall 1992. MS. SILVER.

A review of basic grammar, which is integrated into more complex patterns of written and spoken French. Short compositions and class discussions require active use of students' acquired knowledge of French.

204c. Intermediate French II. Every spring. Spring 1993. MS. DILLMAN AND MS. SILVER.

Continued development of oral and written skills; course focus shifts from grammar to reading. Short readings from French literature, magazines, and newspapers form the basis for the expansion of vocabulary and analytical skills. Active use of French in class discussions and conversation sessions with French assistants.

Prerequisite: **French 203** or placement.

205c. Advanced French I. Every fall. Fall 1992. MR. NUNN.

An introduction to a variety of writing styles and aspects of French culture through readings of literary texts, magazines, and newspapers. Emphasis on student participation, including short oral presentations.

Prerequisite: **French 204** or placement.

206c. Advanced French II. Every spring. Spring 1993. MR. VANDERWOLK.

Intensive course in composition and conversation. Compositions and conversations based on analysis of literary texts and films. Active use of the language through presentation of short theater pieces.

Prerequisite: **French 205** or placement.

209c. Introduction to the Study and Criticism of French Literature. Every year. Fall 1992. MR. VANDERWOLK. Spring 1993. MR. NUNN.

An introduction to the appreciation and analysis of the major genres of literature in French through readings and discussions of important works from the Renaissance to the twentieth century. Students are introduced to critical approaches to literature in general and to French literature in

particular. Writers likely to be considered include Ronsard, La Fontaine, Molière, Voltaire, Flaubert, Sartre, and Yourcenar. Conducted in French.

Prerequisite: **French 205** or placement.

310c. Looking Through a Lens: Framing the Scene. Fall 1992.

Ms. DILLMAN.

Explores the links between technical devices that create new ways of looking at everyday scenes and changes in perception and representation in French literature and the visual arts. Focuses on four inventions (the Claude glass, the photcamera, early film, and modern montage) that extend and shape what and how the eye sees. Analyzes how this seeing is "translated" in the literary and visual arts of the 1760s, 1860s, 1920s, and 1970s in France. Authors and artists to be studied include Claude Lorrain, Diderot, de Staël, Delacroix, Baudelaire, Laforgue, Redon, Michaux, Bonnefis, and Roubaud.

Prerequisite: **French 209** or consent of the instructor.

312c. French Thought: Penseurs, Moralistes, Philosophes. Fall 1993.

MR. NUNN.

Emphasis on the texts of the seventeenth and eighteenth centuries which have had a major influence on French thought. Principal authors: Montaigne (*Essais*), Descartes (*Discours de la méthode*), Pascal (*Pensées*), Molière (*Tartuffe*), La Fontaine (*Fables*), La Bruyère (*Caractères*), La Rochefoucauld (*Maximes*), La Fayette (*La Princesse de Clèves*), Voltaire (*Lettres philosophiques*), Diderot (*Supplément au voyage de Bougainville*), D'Alembert (*Discours préliminaire*), Rousseau (*Rêveries d'un promeneur solitaire*). Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

[313c. Defining the Romantic (French Poetry I).]

314c. French Poetry II: Twentieth-Century French Poetry and the Francophone Tradition. Fall 1993. Ms. DILLMAN.

Explores the poetic tradition of Francophone cultures in the twentieth century. Departing from a model of modern poetry that is based on the late-nineteenth-century French tradition, the course examines the transformation of that model in West Africa, Martinique, Quebec, and North Africa during periods of political and cultural affirmation.

Prerequisite: **French 209** or consent of the instructor.

315c. French Drama I. Spring 1993. MR. NUNN.

French drama of the seventeenth and eighteenth centuries. A survey of classicism and the major new currents of the eighteenth century. Plays by Corneille, Molière, Racine, Marivaux, Beaumarchais, and others are studied. Close interpretive reading of texts and viewing of taped performances. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

316c. From Dramatic Theory to Performance (French Drama II). Spring 1994. Ms. DUPUY SULLIVAN.

Critical study of dramatic theory and practice of the modern period. Beyond the close study of plays, students also write short one-act plays and perform them. Principal authors to be studied include Sartre, Genêt, Ionesco, Beckett, and Sarraute. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

317c. The French Novel in the Nineteenth Century (The French Novel I). Spring 1993. MR. VANDERWOLK.

The development of the genre during the nineteenth century, with emphasis on the works of Balzac, Stendhal, Flaubert, and Zola. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

318c. Realism to Postmodernism in the Twentieth-Century French Novel (The French Novel II). Fall 1993. Ms. DUPUY SULLIVAN.

The development of the French novel from the tradition of nineteenth-century realism to postmodernism. Close attention is paid to critical theory in order to redefine the novel as a genre. Principal authors to be studied include Proust, Gide, Camus, and Duras. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

319c. French Women Writers. Spring 1994. Ms. DILLMAN.

An analysis of gender, love, and writing in novels of nineteenth- and twentieth-century women writers. Emphasis on the conflict between the public and private spheres as seen in the themes of love, sex, and writing, and on the changes in the articulation of this conflict. Authors to be studied include de Staël, Colette, and Duras.

Prerequisite: **French 209** or consent of the instructor.

320c, 321c. Topics in French Literature and Culture I. Every year.

Designed to offer students who have a general knowledge of French literature and civilization the opportunity to study in greater depth individual authors, particular themes, or aspects of French civilization. Conducted in French. This course may be repeated for credit with the contents changed. Intended primarily for seniors.

Prerequisite: **French 209** or consent of the instructor.

320c. French Cinema. Fall 1992. MR. VANDERWOLK.

Twentieth-century France seen through films by major French directors such as Renoir, Truffaut, Godard, Duras, and Malle. Close study of the adaptation of literary texts to the movie screen.

321c. The Myth of Orpheus and Eurydice in French Literature and Culture. Spring 1993. Ms. DILLMAN.

400c. Independent Study. THE DEPARTMENT.

ITALIAN

101c, 102c. Elementary Italian. Every year. Ms. PELLEGRINI.

Three class hours per week, plus drill sessions and language laboratory assignments. Study of the basic forms, structures, and vocabulary. Emphasis in the first semester is on listening comprehension and spoken Italian. In the second semester, more attention is paid to reading and writing.

203c, 204c. Intermediate Italian. Every year. Ms. PELLEGRINI.

Three class hours per week and one weekly conversation session with assistant. Aims to increase fluency in both spoken and written Italian. Grammar fundamentals are reviewed. Class conversation and written assignments are based on contemporary texts of literary and social interest.

Prerequisite: **Italian 102** or consent of the instructor.

[**205c. Advanced Italian I.**]

[**206c. Advanced Italian II.**]

[**209c, 210c. Introduction to Italian Literature.**]

[**321c. Modern Italian Culture.**]

[**322. Italian Literature in Translation.**]

[**400c. Advanced Independent Study and Honors.**]

SPANISH

101c, 102c. Elementary Spanish. Every year. Fall 1992. Ms. JAFFE.
Spring 1993. Mr. TURNER.

Three class hours per week, plus drill sessions and laboratory assignments. An introduction to the grammar of Spanish, aiming at comprehension, reading, writing, and simple conversation. Emphasis in the first semester is on grammar structure, with frequent oral drills. In the second semester, more attention is paid to reading and writing.

Prerequisite: **Spanish 101** is open to first- and second-year students who have had less than two years of high school Spanish. Juniors and seniors wishing to take **Spanish 101** must have the consent of the instructor.

203c, 204c. Intermediate Spanish. Every year. Fall 1992. Mr. THOMPSON.
Spring 1993. Ms. JAFFE.

Three class hours per week and a conversation session with the teaching assistant. Grammar fundamentals are reviewed. Class conversation and written assignments are based on readings in modern literature.

Prerequisite: **Spanish 102** or placement.

205c. Advanced Spoken and Written Spanish. Every fall. Mr. TURNER.

Intended to increase proficiency in the four skills. A variety of texts are assigned with the aim of improving speed and accuracy of reading, and they also serve as the basis for controlled discussion aimed at spoken fluency.

Visual media are used to develop aural comprehension and as the basis for the study of culture. Frequent written assignments.

Prerequisite: **Spanish 204** or placement.

209c. Introduction to the Study and Criticism of Hispanic Literature. Every spring. MR. THOMPSON.

Intended to develop an appreciation of the major genres of literature in Spanish and to foster the ability to discuss them orally and in writing. Personal responses as well as the use of critical methods are encouraged in discussions. Conducted in Spanish.

Prerequisite: **Spanish 205** or consent of the instructor.

311c. Medieval and Golden Age Spanish Literature. Every year. Fall 1993.

Readings from the major writers of the Spanish Renaissance and the baroque period. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

312c. Modern Spanish Literature. Every year. Spring 1993. MR. THOMPSON.

Readings from the major writers of Spanish literature from the eighteenth century to the modern period. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

313c,d. Indigenous and Hispanic Literature of Colonial Latin America. Fall 1992. MS. JAFFE.

Introduction to the literature of the encounter between indigenous and Hispanic cultures in Latin America from the fifteenth through the eighteenth centuries. Emphasis on understanding the cultural and racial heterogeneity of Latin American society through its foundational texts. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

314c,d. Modern Spanish-American Literature. Every year. Spring 1993. MR. TURNER.

An introduction to modern Spanish-American literature from modernism to the generation of the Boom. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

320c-329c. Topics in Spanish and Hispanic-American Literature I and II. Every year.

Designed to provide students who have a basic knowledge of literature in Spanish the opportunity to study more closely an author, a genre, or a period. **Spanish 320** and **321** may be repeated for credit with the contents changed. Conducted in Spanish.

Prerequisites: Any two of **Spanish 311, 312, 313, and 314**, or consent of the instructor.

320c. Spanish Theater. Fall 1992. MR. THOMPSON.

321c. Nineteenth-Century Spanish-American Literature. Spring 1993. Ms. JAFFE.

Spanish-American literature from the Independence period to 1900, with emphasis on the roles of romantic and realist writers in forging national identities, both through their literature and their political activity. Conducted in Spanish.

322c. Visions of History. Fall 1992. MR. TURNER.

Poetry and essays of the twentieth century in Latin America dealing with history.

[**350c. Modern Spanish-American Literature in English Translation.**]

400c. Independent Study and Honors. THE DEPARTMENT.

Russian

Professor

Jane E. Knox

Associate Professor

Raymond H. Miller, *Chair*

Teaching Fellow

Leah G. Shulsky

Requirements for the Major in Russian Language and Literature

The Russian major consists of ten courses (eleven for honors). These include **Russian 101, 102 and 203, 204**; five courses in Russian above **Russian 204**; and one approved course in either Russian literature in translation or Slavic civilization, or an approved related course in government, history, or economics (**Economics 214; Government 230, 235, and 271; History 217 and 218**).

Study Abroad

Students are encouraged to spend at least one semester in Russia. At least two advanced Russian students will be chosen each year to study for two semesters in Russia as part of the Consortium of American Colleges exchange (interested students should consult the Russian department faculty or the dean of the College). Other approved one-semester Russian language programs in Moscow and St. Petersburg are open to all students who have taken the equivalent of three years of Russian (two years for a summer program).

Advanced Independent Study

This is an option intended primarily for students who are working on honors projects. It is also available to students who have taken advantage of the regular course offerings and wish to work more closely on a particular topic. Independent study is not an alternative to regular course work. An application should be made to a member of the department prior to the semester in which the project is to be undertaken and must involve a specific proposal in an area in which the student can already demonstrate basic knowledge. Two semesters of advanced independent studies are required for honors in Russian.

Requirements for the Minor in Russian

The minor consists of seven courses (including the first two years of Russian).

101c, 102c. Elementary Russian. Every year. Fall 1992. Ms. KNOX. Spring 1993. Mr. MILLER.

Emphasis on the acquisition of language skills through imitation and repetition of basic language patterns; the development of facility in speaking and understanding simple Russian. Conversation hour with native speaker.

203c, 204c. Intermediate Russian. Every year. Fall 1992. Mr. MILLER. Spring 1993. Ms. KNOX.

A continuation of Russian 101, 102. Emphasis on maintaining and improving the student's facility in speaking and understanding normal conversational Russian. Writing and reading skills are also stressed. Conversation hour with native speaker.

Prerequisite: Russian 101, 102.

305c. Advanced Reading and Composition in Russian. Every fall. Ms. KNOX.

Intended to develop the ability to read Russian at a sophisticated level by combining selected language and literature readings, grammar review, and study of Russian word-formation. Discussion and reports in Russian. Conversation hour with native speaker.

Prerequisite: Russian 203, 204.

309c. Nineteenth-Century Russian Literature. Every fall. Mr. MILLER.

A survey of Russian literature of the nineteenth century. Special attention is paid to the short story and the *povest'* (short novel) of such writers as Pushkin, Lermontov, Gogol, Dostoevsky, and Tolstoy.

Prerequisite: Russian 305.

310c. Modern Russian Literature. Every spring. Ms. KNOX.

An examination of various works of modern Russian literature (Soviet and émigré), with emphasis on the development of the short story and the *skaz* (folk tale). The differences and similarities between prerevolutionary and contemporary Soviet literature are discussed. Authors to be studied include Blok, Mayakovsky, Zoshchenko, Platonov, Bulgakov, Pasternak, Brodsky, Shukshin, Aksyonov, and others. Short term papers. Conducted in Russian.

Prerequisite: Russian 305.

315c. Translation of Russian Prose. Every other spring. Spring 1994. Mr. MILLER.

Focuses on the translation of Russian prose into English. Texts are selected from nineteenth- and twentieth-century memoirs, political tracts, scholarly texts, and at least one piece of *belles lettres*. Attention is given to different theories of translation and typical translation strategies; Russian grammatical structures and word groups that are especially difficult to render into English;

and the cultural significance of assigned texts. Class discussion is conducted in Russian.

Prerequisite: **Russian 305** or consent of the instructor. (May be taken concurrently with **Russian 305** with consent of the instructor.)

316c. Topics in Literature.

Specific literary genres or authors not covered in the other courses. This course may be repeated for credit with the contents changed.

Russian Poetry. Spring 1993. MR. MILLER.

Examines various nineteenth-century Russian poets, including Baratynsky, Pushkin, Lermontov, and Tyutchev; selections from eighteenth-century poetry (Lomonosov and Derzhavin) will be studied for comparison, as will some later verse from the symbolist movement. Includes discussion of Russian poetics and the cultural-historical context of each poem. Reading and discussion are in Russian.

Prerequisite: **Russian 305** or equivalent.

290c. Intermediate Independent Study. THE DEPARTMENT.

Upon demand, this course may be conducted as a small seminar for several students in areas not covered in the above courses, such as the Russian media. This course may be repeated for credit with the contents changed.

Prerequisite: **Russian 305** or equivalent.

400c. Advanced Independent Study. THE DEPARTMENT.

Individual research in Russian studies. Major sources should be read in Russian. This course may be repeated for credit with the contents changed. A two-semester project is necessary for honors in Russian.

Prerequisite: **Russian 309** or **310**.

IN ENGLISH TRANSLATION

215c. Russia, the Slavs, and Europe. Every other spring. Spring 1993. MR. MILLER.

An introduction to the cultural history of Russia and Eastern Europe, with special emphasis on the unique position Russia has occupied within European civilization. Specific topics include Russia's ethnic and linguistic background, early Russian culture, the development of Russian religious and political thought, and the problematic relationships that have existed between Russia, the other Slavic nations, and the West. No prior study of European civilization is assumed.

220c. Nineteenth-Century Russian Literature. Every other fall. Fall 1993. MR. MILLER.

Traces the development of Russian realism and the Russian novel. Specific topics include the pre-nineteenth-century literary background, the origins of realism as a movement, and the intellectual and political milieu of the time. Writers to be read include Pushkin, Lermontov, Gogol, Goncharov,

Dostoevsky, and Tolstoy. Russian majors are required to do some of the reading in Russian.

221c. Twentieth-Century Russian Literature. Every other spring. Spring 1994. Ms. KNOX.

A two-part discussion of twentieth-century Russian prose before and after the official proclamation of socialist realism. The first part is devoted to the innovative period of modernism and the avant-garde in the 1920s. The second half examines the return to didactic realism and the emergence of an underground dissident movement. Writers to be discussed include Andreyev, Bely, Zoshchenko, Bulgakov, Sinyavsky, Solzhenitsyn, Aksyonov, and Brodsky. Russian majors are required to do some of the reading in Russian.

222c. Topics Course. THE DEPARTMENT.

Works in specific areas of Russian literature not investigated in other departmental courses. A specific author, genre, literary movement, or social phenomenon may be emphasized. This course may be repeated for credit with the contents changed. Russian majors are required to do some of the reading in Russian. This course is offered only when staffing permits.

Women in Russian Society and Culture. Every other fall. Fall 1992. Ms. KNOX.

Examines the roles women have played in Russian literature and Russian society. Special attention is given to women revolutionaries and the "new status" of women guaranteed by the Revolution. Readings include short stories, novels, autobiographies, and nonfiction works. Authors include Pushkin, Tolstoy, Dostoevsky, Chekhov, Kollontai, Tsvetaeva, Akhmatova, Ginzburg, and others. Russian majors are required to do some of the reading in Russian.

223c. Dostoevsky and the Novel. Every other spring. Spring 1993. Ms. KNOX.

Examines Dostoevsky's use of the novel to portray the "fantastic" reality of the city and its effects on the human psyche. Special attention is given to the author's quest for guiding principles of freedom and love in a world of violence and cynicism. Emphasis on Dostoevsky's anti-Western and antimaterialist bias in his portrayal of the struggle between extreme individualism and self-renunciation in a utopian brotherhood. Russian majors are required to do some of the reading in Russian.

Sociology and Anthropology

Professors

Craig A. McEwen, *Chair*

Daniel W. Rossides

Associate Professors

Susan E. Bell*

Susan A. Kaplan†

Assistant Professors

Sara A. Dickey*

Nancy E. Riley

Visiting Assistant Professors

John H. Blitz

Nilanjana Chatterjee

Instructor

Paul J. McLaughlin (*first semester*)

Requirements for the Major

In consultation with an advisor, each student plans a major program that will nurture an understanding of society and the human condition, demonstrate how social knowledge is acquired through research, and enrich his or her general education. On the practical level, a major program prepares the student for graduate study in sociology and anthropology and contributes to preprofessional programs such as law and medicine. It also provides background preparation for careers in urban planning, the civil service, social work, business or personnel administration, social research, law enforcement and criminal justice, the health professions, journalism, secondary school teaching, and programs in developing countries.

A student may choose either of two major programs or two minor programs:

The major in sociology consists of ten courses, including **Sociology 101, 201, 209 or 211, and 310**. A minimum of eight courses in sociology may be supplemented by two advanced courses from anthropology or, as approved by the department chair, by two advanced courses from related fields to meet the student's special needs. **Sociology 201** should be taken in the sophomore year.

The major in anthropology consists of eight courses, including **Anthropology 101, 102, 201, and 301**, and one course with an areal focus (numbered in the 130s and 230s). Students are urged to complete **Anthropology 101, 102, and 201** as early as possible. **Anthropology 301** should be taken in the senior year. One or two of the eight courses may be taken from the advanced offerings in sociology or, as approved by the department chair, from related fields to meet the student's special needs. Study-abroad programs are encouraged as part of a student's study of other cultures.

Requirements for the Minor

The minor in sociology consists of five sociology courses, including **Sociology 201, 209 or 211, and 310**.

The minor in anthropology consists of five anthropology courses, including **Anthropology 101 and 301, either 102 or 201, and an area study course (130s and 230s)**.

For the anthropology major or minor program, one semester of independent study may be counted. For the sociology major or minor program, two semesters of independent study may be counted.

Departmental Honors

Students distinguishing themselves in either major program may apply for departmental honors. Awarding of the degree with honors will ordinarily be based on grades attained in major courses and a written project (emanating from independent study), and will recognize the ability to work creatively and independently and to synthesize diverse theoretical, methodological, and substantive materials.

SOCIOLOGY

101b. Introduction to Sociology. Every semester. THE DEPARTMENT.

The major perspectives of sociology. Application of the scientific method to sociological theory and to current social issues. Theories ranging from social determinism to free will are considered, including the work of Marx, Weber, Durkheim, Merton, and others. Attention is given to such concepts as role, status, society, culture, institution, personality, social organization, the dynamics of change, the social roots of behavior and attitudes, social control, deviance, socialization, and the dialectical relationship between individual and society.

201b. Introduction to Social Research. Every spring. MR. McEWEN.

Provides firsthand experience with the specific procedures through which social science knowledge is developed. Emphasizes the interaction between theory and research, and examines the ethics of social research and the uses and abuses of research in policy making. Reading and methodological analysis of a variety of case studies from the sociological literature. Field and laboratory exercises that include observation, interviewing, use of available data (e.g., historical documents, statistical archives, computerized data banks, cultural artifacts), sampling, coding, use of computer, elementary data analysis and interpretation. Lectures, laboratory sessions, and small-group conferences.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

[203b. Families in American Society.]

204b. Families: A Comparative Perspective. Spring 1993. MS. RILEY.

Examines families in different societies. Issues addressed include definition and concept of the "family"; different types of family systems; the interaction of family change and other social, economic, and political change; the relationships between families and other social institutions; the role of gender and age in family relationships; and sources and outcomes of stability, conflict, and dissolution within families.

Prerequisite: **Sociology 101** or **Anthropology 101**.

[206b. Urban Sociology.]

208b,d. Race and Ethnicity. Fall 1993. MR. McEWEN.

The social and cultural meaning of race and ethnicity, with emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examines the relationships between race and class. Comparisons between the status of racial and ethnic minorities in the United States and their status in other selected societies. (Same as **Afro-American Studies 208.**)

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

209b. Social Theory. Every fall. MR. ROSSIDES.

A critical examination of some representative theories of the nature of human behavior and society. Social theory is related to developments in philosophy and natural science, and symbolic developments as a whole are related to social developments. The thought of some major figures in the ancient world (especially Plato, Aristotle, and the Stoics) and the medieval world (especially St. Thomas and Marsilio of Padua) is analyzed, but the main focus is on the figures who have struggled to explain the nature of capitalism: for example, Hobbes, Locke, the *philosophes*, Comte, Spencer, Sumner, and Ward, with special attention to Marx, Durkheim, Weber, and selected contemporary figures, including world system theorists.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

[210b. Sociology of Work and Organizations.]

211b. Classics of Sociology. Fall 1992. MR. McLAUGHLIN.

An analysis of selected works by the founders of modern sociology. Particular emphasis is given to understanding differing approaches to sociological analysis through detailed textual interpretation. Works by Marx, Weber, Durkheim, and selected others are read.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

213b. Social Stratification. Spring 1993. MR. ROSSIDES.

A critical examination of representative theories of inequality. Opens with a review of the basic questions and concepts in social stratification, and then develops case studies of the various types of social inequality: for example, El Salvador, Korea, and the USSR. The heart of the course is an extended analysis of the American class system to determine sources of stability and conflict, and to identify legitimate and illegitimate forms of inequality. Considerable attention is given to theories of imperialism and to determining the United States' role in the international system of stratification.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

214b. Science, Technology, and Society. Spring 1994. Ms. BELL.

First, identifies the social structure and dynamics of science as an institution and examines the relationship between the institution of science and the content of scientific knowledge. Explores the role of science and scientific knowledge in technological innovation. Next, examines the progress and problems associated with scientific and technological changes such as nuclear power and the production and distribution of pesticides and other chemicals. Considers the social and intellectual origins of these technological innovations and their impact on society from different theoretical perspectives.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

215b. Criminology and Criminal Justice. Spring 1994. MR. McEWEN.

Focuses on crime and corrections in the United States, with some cross-national comparisons. Examines the problematic character of the definition of "crime." Explores empirical research on the character, distribution, and correlates of criminal behavior and interprets this research in the light of social structural, cultural, and social psychological theories of crime causation. Discusses the implications of the nature and causes of crime for law enforcement and the administration of justice. Surveys the varied ways in which prisons and correctional programs are organized and assesses research about their effectiveness.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

217b. Environmental Sociology. Fall 1992. MR. McLAUGHLIN.

Introduction to the field of environmental sociology, providing an overview of the basic concepts and major perspectives in the field. The theoretical, philosophical, and historical roots of the social sciences' inability to deal with the question of human-environment interactions are explored. The emergence of the subdiscipline of environmental sociology is examined, and some of the major theoretical and policy questions currently confronting the field are discussed. The environmental movement itself is analyzed from a sociological perspective.

Prerequisite: Previous course in sociology or anthropology.

218b. Sociology of Law. Every fall. MR. McEWEN.

An analysis of the development and function of law and legal systems in industrial societies. Examines the relationships between law and social change, law and social inequality, and law and social control. Special attention is paid to social influences on the operation of legal systems and the resultant gaps between legal ideals and the "law in action."

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

219b. Sociology of Gender Roles. Fall 1992. Ms. RILEY.

Focuses on gender as an organizing principle of societies, and examines how gender is involved in and related to differences and inequalities in social roles, gender identity, sexual preference, and social constructions of knowledge. Explores the role of gender in institutional structures such as the economy, the family, religion, and the state. Particular attention is paid to gender systems in different cultures and societies.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

222b. Introduction to Human Population. Spring 1993. Ms. RILEY.

An introduction to the major issues in the study of population. Topics include an examination of the demographic processes of fertility, mortality, and migration; the history of and explanations for fertility and mortality declines in the United States and Western Europe; recent demographic changes in Third World countries; the role of government policy in population change; and the social, economic, health, and environmental causes and impacts of population change.

Prerequisite: **Sociology 101** or **Anthropology 101**.

[230b,d.The Populations of Asia.]**235b. Comparative Societies.** Spring 1993. Mr. ROSSIDES.

An analysis of the various types of society in human history and their interrelations. After a brief discussion of hunting-gathering, horticultural, and agrarian societies, and the hybrid societies of ancient Israel, Greece, and Rome, the course focuses on representative types of developed and developing societies in today's world.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

250b. Collective Behavior. Fall 1992. Mr. MCEWEN.

An examination of the nature of collective behavior, with primary emphasis on social movements. Describes and analyzes social phenomena such as crowds, audiences, publics, riots, reform movements, conservative movements, and revolutions. Students may study a selected aspect of collective behavior in depth.

Prerequisites: Two courses in sociology or anthropology, or consent of the instructor.

251b. Sociology of Health and Illness. Fall 1993. Ms. BELL.

Examines the social contexts of physical and mental health, illness, and medical care. Deals with such topics as the social, environmental, and occupational factors in health and illness; the structure and processes of health care organizations; the development of health professions and the health work force; doctor-patient relationships; ethical issues in medical

research; and health care and social change.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor. Not open to students who have previously taken **Sociology 151**.

252b. Sociology of Illness and Disability. Spring 1993. Ms. BELL.

Focuses on the subjective experience of illness, especially chronic illness and disability. How do people make meaning of illness? What strategies do they use in their daily lives to manage and direct the course of their illness? In what respects do these experiences vary according to such factors as gender, race, ethnicity, and social class? Issues to be addressed include uncertainty; illness career; stigma; identity; relationships with family, community, and caregivers; work; self-help and the independent living movement; feminism and disability rights.

Prerequisite: **Sociology 101** or **Anthropology 101**, or consent of the instructor.

310b. Advanced Seminar: Current Controversies in Sociology.

Spring 1993. Mr. McEWEN.

Draws together different theoretical and substantive issues in sociology in the United States, primarily since 1950. Discusses current controversies in the discipline, e.g., quantitative versus qualitative methodologies, micro versus macro perspectives, and pure versus applied work.

Prerequisites: Junior standing and two courses in sociology, or consent of the instructor.

290b. Intermediate Independent Study in Sociology. Ms. BELL, Mr. McEWEN, Mr. McLAUGHLIN, Ms. RILEY, AND Mr. ROSSIDES.

400b. Advanced Independent Study and Honors in Sociology.

Ms. BELL, Mr. McEWEN, Mr. McLAUGHLIN, Ms. RILEY, AND Mr. ROSSIDES.

ANTHROPOLOGY

101b. Introduction to Cultural Anthropology. Every spring.

Ms. CHATTERJEE.

An introduction to the concepts, methods, theories, findings, and applications of cultural anthropology. Study of the differences and similarities among the cultures of the world and attempts by anthropologists to explain them. Among the topics to be covered are anthropological fieldwork, the nature of culture, the relation of language to culture, the relation of the environment to culture, family and kinship, political and economic systems, religion, sex, gender, and ethnocide.

102b,d. Introduction to World Prehistory. Every fall. Mr. BLITZ.

An introduction to the disciplines of anthropology and archaeology and the studies of human biological and cultural evolution. Among the subjects covered are conflicting theories of human biological evolution, the debates over the genetic and cultural bases of human behavior, the expansion of

human populations into various ecosystems throughout the world, the domestication of plants and animals, the shift from nomadic to settled village life, and the rise of complex societies, the state, and civilization.

134b,d. Asian Civilizations. Spring 1993. Ms. DICKEY.

Readings in original texts from India, China, and Japan provide the basis for an exploration of basic patterns of thought and cultural expression in South and East Asia. (Same as **Asian Studies 101.**)

201b. Anthropological Research. Fall 1992. Ms. CHATTERJEE.

Anthropological research methods and perspectives are examined through classic and recent ethnography, statistics and computer literacy, and the student's own fieldwork experience. Topics covered are ethics, analytical and methodological techniques, the interpretation of data, and the use and misuse of anthropology.

Prerequisite: Sophomore standing or higher; **Anthropology 101** strongly recommended.

203b. Psychological Anthropology. Fall 1993. Ms. DICKEY.

Focuses on four topics in psychological anthropology: culture and personality; the effects of culture on cognition; definitions and treatment of mental illness in different cultures; and the application of psychoanalytical theory in anthropology. Shows how anthropological theories and cross-cultural studies can be combined with psychological analysis to help in understanding the cultural influences on human mental processes.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

207b. Ritual and Myth. Fall 1993. THE DEPARTMENT.

An examination of the place of ritual and myth in the larger social context. A range of religious phenomena from diverse societies is examined, including magic, witchcraft, shamanism, cults, revitalization movements, and civic religion. Major theoretical approaches to the study of religion are discussed and critiqued, including evolutionism, functionalism, structuralism, psychoanalysis, cultural ecology, and Marxism.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

208b. Critical Perspectives on the Cultures of Colonialism and Nationalism. Spring 1993. Ms. CHATTERJEE.

Addresses the contours—historical, political, theoretical, literary—of the discourses of colonialism and decolonization. Course focus is thematic rather than geographical and emphasizes commonalities and differences of historical and cultural developments. Issues to be discussed include ideologies of difference, power and violence, apologists and opponents of colonialism, “the empire writing back,” intellectualism, and contemporary theorization of the “Third World.”

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

209b. Politics, Culture, and Society. Fall 1993. THE DEPARTMENT.

The cross-cultural study of politics in groups ranging from nomadic bands to nation-states. Issues examined include, How egalitarian are nonstate political systems? How is social order maintained in societies lacking centralized government? How is warfare waged? How are inequalities of political power within a society legitimized? What is the role of symbolism in political legitimation and in revolution? and What social processes are involved in attracting and mobilizing political support?

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

220b,d. Hunters and Gatherers. Spring 1994. MS. KAPLAN.

Traces the origins and challenges the stereotype of hunter-gatherers as small groups of people who are constantly on the move and exhibit the simplest levels of social, olitical, and economic organization. Topics include hunter-gatherer adaptations to the world's changing environment; strategies of resource procurement; settlement patterns; technological complexity; levels of social, economic, and political integration; and religious life. Compares such groups as the Australian Aborigines, Bushmen, Native Americans, and New Guinea Highlanders.

Prerequisites: At least one previous course in anthropology or sociology, and sophomore standing.

221b. The Rise of the State. Fall 1992. MR. BLITZ.

Scholars have proposed conflicting theories to explain the evolution of state societies and civilizations in the Old and New Worlds. This course reviews the major debates and examines the mechanisms and patterns of state formation, using archaeological and ethnographic examples from Africa, the Americas, and the Pacific Islands.

Prerequisite: At least one previous course in anthropology or sociology.

222b. Culture Through Performance. Fall 1994. MS. DICKEY.

"Cultural performance" covers not only drama, dance, and music, but also such cultural media as ritual, literature, celebration, and spectacle. The anthropological study of these media examines their performers, producers, and audiences in addition to their form and content. Questions fundamental to this study are, What does cultural performance uniquely reveal about a culture to both natives and outsiders? and What social, psychological, and political effects can it have on participants and their societies?

Prerequisite: Previous course in anthropology or sociology, or consent of instructor.

231b,d. Native Peoples and Cultures of Arctic America. Spring 1994. MR. BLITZ.

For thousands of years, Eskimos (Inuit), Indian, and Aleut peoples lived

in the arctic regions of North America as hunters, gatherers, and fishermen. Their clothing, shelter, food, and implements were derived from resources recovered from the sea, rivers, and the land. The characteristics of arctic ecosystems are examined. The social, economic, political, and religious lives of various Arctic-dwelling peoples are explored in an effort to understand how people have adapted to harsh northern environments.

Prerequisite: Previous course in anthropology or sociology.

232b. Peoples of Northernmost Europe. Fall 1993. MR. BIGELOW.

Examines the past and present cultures of northern Scandinavia, the far northern islands of the North Atlantic (the Orkney, Shetland, and Faeroe islands), Iceland, and Greenland. Societies to be discussed range from the early Viking explorers of North America to the reindeer herders of modern Finland. Archaeological, ethnohistoric, and ecological evidence is reviewed to identify the environmental and human factors that influenced the growth and, in some cases, the extinction of the northernmost Norse, Sami (Lapp), and Celtic cultures.

Prerequisite: Previous course in anthropology or sociology.

[234b. Women, Power, and Identity in South Asia.]

235b,d. South Asian Cultures and Societies. Fall 1992. MS. CHATTERJEE.

An introduction to the cultures and societies of South Asia, including India, Nepal, Pakistan, Bangladesh, and Sri Lanka. Issues of religion, family and gender, caste, and class are examined through ethnographies, novels, and films, and through in-class simulations of marriage arrangements, religious ritual, and caste ranking. (Same as **Asian Studies 235.**)

Prerequisite: Previous course in anthropology, sociology, or Asian studies.

236b,d. Political Identity and Leadership in South Asia. Fall 1994.

MS. DICKEY.

In South Asia, political identity is often based on “primordial” ties such as caste, religion, ethnicity, language, and region. Political leadership involves various strategies for addressing and transcending these communal interests. This course examines the development of different political identities and the importance of issues such as personality politics and patronage in electoral leadership in several South Asian countries. (Same as **Asian Studies 236.**)

Prerequisite: Previous course in anthropology, sociology, or Asian studies.

239b,d. Indigenous Peoples of North America. Spring 1993. MR. BLITZ.

An overview and analysis of native North American societies from pre-Columbian times to the present. Topics include the political, economic, family, and religious organization of Native American societies; the impact of European expansion; and the current situation—both on and off reservation—of Native Americans.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

301b. Anthropological Theory. Every spring. Ms. DICKEY.

An examination of the development of various theoretical approaches to the study of culture and society. Anthropology in the United States, Britain, and France is covered from the nineteenth century to the present. Contemporary controversies in anthropological theory are discussed. Among those considered are Morgan, Tylor, Durkheim, Boas, Mauss, Malinowski, Radcliffe-Brown, Mead, Geertz, and Lévi-Strauss.

Prerequisites: Two courses in anthropology or consent of the instructor.

290b. Intermediate Independent Study in Anthropology. MR. BLITZ, MS. CHATTERJEE, MS. DICKEY, AND MS. KAPLAN.**400b. Advanced Independent Study and Honors in Anthropology.**

MR. BLITZ, MS. CHATTERJEE, MS. DICKEY, AND MS. KAPLAN.

Theater Arts

Assistant Professor and Director of Dance

June A. Vail

Director of Theater

A. Raymond Rutan

Associate Professor

Randolph Stakeman, *Chair*

Technical Director

Michael P. Roderick

Visiting Lecturer

Daniel McCusker

Teaching Fellows

Gwyneth Jones

Paul Sarvis

The Department of Theater Arts comprises two divisions: dance and theater. Although no major is offered, students with special interest may, with faculty advice, self-design a major. Students may minor in dance.

DIVISION OF DANCE

The Division of Dance provides a coherent course of study in dance history, theory, and criticism; choreography; and performance studies, including dance technique and repertory. The division's humanistic orientation emphasizes dance's relation to theater and the fine arts, as well as its fundamental connection to the broad liberal arts curriculum. The program's goal is dance literacy and the development of skills important to original work in all fields: keen perception, imaginative problem solving, discipline, and respect for craft.

Requirements for the Minor in Dance

The minor consists of five course credits: **Dance 101, 121, and 141**, and four semesters of dance technique and/or repertory. An independent study, **Dance 291 or 401**, may be substituted for a required course if necessary.

101c. Introduction to Dance. Every other fall. Fall 1992. Ms. VAIL.

Considers dance and movement as historical cultural phenomena. Topics include the importance of movement in shaping our perception of the world; the relationship of dance and movement to gender roles, political and social power, religion, and personal and ethnic identity; conceptions of the body as revealed through dance; and anthropological perspectives on one's own experiences with the body, movement, and dance. Direct experience learning dances from various traditions, including Afro-American jitterbug, traditional Balkan line dances, Hawaiian hula, and contact improvisation, combined with readings, discussion, videos, and live performances. Enrollment limited to 20 students.

121c. Topics in Dance History. Every other fall.

American Dance in the Twentieth Century. Fall 1993. Ms. VAIL.

Dance as an American art form since 1900. Focus on choreographers and performers, aesthetics, and the relationship of dance to cultural norms, such as gender roles, and to technological advances, such as film and videotape. This course may be repeated for credit with the contents changed.

142c. Approaches to Choreography: Improvisation and Composition. Every spring. Spring 1993. Ms. VAIL.

Explores ways of creating dances and multimedia performance works, with emphasis on improvisation. Examines various choreographic methods that correspond to compositional practices in writing, drawing, composing, and other art forms, revealing broader applications of creative process. In addition to making three individual or group pieces and a final project, students work with visiting professional performers and attend live performances. Includes reading, writing, discussion, and videos. Enrollment limited to 15 students.

291c. Intermediate Independent Study in Dance. Ms. VAIL.

401c. Advanced Independent Study in Dance. Ms. VAIL.

Performance Studies

The foundation for performance studies classes in dance technique and repertory is modern dance, a term designating a wide spectrum of styles. The program focuses principally on an inventive, unrestricted approach to movement. This offers an appropriate format for exploring the general nature of dance and the creative potential of undergraduates. Courses in ballet and jazz technique are also offered when possible.

Performance studies courses (171 and 181) earn one-half credit each semester. Each course may be repeated a maximum of four times for credit. Students may enroll in **Dance 171 and 181** in the same semester, or for two consecutive semesters, for *one full academic course credit*. Attendance at all classes is required. Grading is Credit/Fail.

Instructors for 1992–93: Gwyneth Jones, Daniel McCusker, and Paul Sarvis.

171c. Dance Technique. Every semester. Ms. JONES AND MR. SARVIS.

Classes in modern dance and ballet technique include basic exercises to develop dance skills such as balance and musicality; more challenging movement combinations and longer dance sequences build on these exercises. In the process of focusing on the craft of dancing, students are also encouraged to develop their own style. During the semester, a historical overview of twentieth-century American dance on video is presented. Attendance at all classes is required.

181c. Repertory and Performance. Every semester. Ms. JONES, MR. MCCUSKER, AND MR. SARVIS.

Repertory students are required to take **Dance 171** concurrently, unless exempted by the instructor.

Repertory classes provide the chance to learn faculty-choreographed works or reconstructions of important historical dances. Class meetings are conducted as rehearsals for performances at the end of the semester: the Fall Studio Show and the annual Spring Performance in Pickard Theater, and Museum Pieces at the Walker Art Building in May. Additional rehearsals are scheduled before performances. Attendance at all classes and rehearsals is required. Enrollment limited to 12 students.

DIVISION OF THEATER

The Division of Theater in the Department of Theater Arts offers courses in acting and directing, set design, and, on occasion, in areas of special interest. The theater technician teaches stagelighting.

69c. Playwriting. Fall 1992. MR. RUTAN.

A creative writing course focusing on the one-act play form.

Prerequisite: Consent of the instructor.

70c. Acting and Directing. Spring 1993. MR. RUTAN.

A studio class for students interested in the fundamentals of acting and directing. Enrollment limited to 15 students, with representation of all four classes. Selection by lottery at first meeting.

Prerequisite: Consent of the instructor.

72c. Technical Theater. Every semester. MR. RODERICK.

An introduction to the fundamentals of stagelighting.

Prerequisite: Consent of the instructor. Enrollment limited to 10 students.

[271c, 272c. Topics in Theater.]

290c. Intermediate Independent Study in Theater. MR. RUTAN.

400c. Advanced Independent Study in Theater. MR. RUTAN.

Women's Studies

Administered by the Committee on Women's Studies

Visiting Professor

Mary Brown Parlee

Associate Professor

Sarah F. McMahon, *Director*

Program Administrator

Jananne K. Phillips

Women's studies is an interdisciplinary program that incorporates into the curriculum recent research done on women and gender. The women's studies program explores the relationship between traditional disciplinary approaches to women's roles and emerging perspectives in the arts, humanities, and natural and social sciences. The program addresses women's experience on its own terms, and, using gender as a category of analysis, examines the status of and the relationship between women and men.

Requirements for the Minor in Women's Studies

The minor consists of **Women's Studies 101**, normally taken in the first or second year, and four additional courses. To ensure the interdisciplinary nature of the minor, three of these courses must be outside the student's major department, and one must be outside the division of the major.

The women's studies courses below may also be used to formulate a student-designed major that emphasizes women's studies. Related independent studies are offered in all humanities and social science departments. Further information on women's studies is available at the Women's Studies Program office located in the Women's Resource Center.

101. Introduction to Women's Studies. Fall 1992. Ms. PARLEE.

Provides an interdisciplinary overview of approaches and topics central to the study of women and gender. Through historical, literary, and sociological analyses, a series of cross-cultural themes is examined, including cultural representations of women and of gender, identity and role issues, health and reproduction, work, feminism, and other gender-related concerns.

201. Feminist Theory and Methodology. Spring 1993. Ms. PARLEE.

Provides an overview of recent developments in the new scholarship on women, and offers a historical, cross-disciplinary review of theories of gender and of the relationships between gender and power. An interdisciplinary approach is used to compare and contrast analyses from diverse perspectives such as liberal feminism, radical feminism, post-structuralism, and Marxist feminism.

Prerequisite: **Women's Studies 101** or consent of the instructor.

[242. Sexuality and Reproduction.]

390. Political Renewal in the Late Twentieth Century: A Critical Assessment of the Contribution of Feminism, Multiculturalism, and Ecology. Fall 1992. MR. RENSENBRINK.

An interdisciplinary seminar for students with a focus in Asian studies, Afro-American studies, environmental studies, and/or women's studies.

First discusses the concept of political renewal, with emphasis on the nature and feasibility of democracy under modern conditions. Then examines concepts of feminism, multiculturalism, and ecology as they evolve in social movements of the late twentieth century. Three kinds of encounters, or struggles, are examined: the internal conceptual debate within each; the competition and cooperation among all three; and their encounters with the prevailing political system and culture. Readings include works of intellectuals and activists within each movement, several of whom will visit Bowdoin for discussions with students and the community. A final project attempts to put in critical perspective the relation between these movements and the possibilities for political renewal. (Same as **Afro-American Studies 390**, **Environmental Studies 390**.)

Prerequisites: Two or more lower-level courses in one or more of the four interdisciplinary programs, or consent of the instructor.

CROSS LISTINGS

(For full course descriptions and prerequisites, see the appropriate department listings.)

Anthropology

[**234b. Women, Power, and Identity in South Asia.**]

Art

228c. Notions of Renaissance Women. Spring 1993. Ms. MCGEE.

Classics

[**221c. Women in the Life and Literature of Classical Antiquity.**]

222c. Sexuality and Society in Greece and Rome. Spring 1993. MR. HALL.

Economics

217b. Economics of Population. Every other year. Spring 1994.

Ms. DEGRAFF.

Prerequisite: **Economics 101**.

301b. The Economics of the Family. Spring 1994. Ms. CONNELLY.

Prerequisites: **Economics 255** and **257**, or consent of the instructor.

Education

101c. Education in the Twentieth Century. Fall 1992. Ms. MARTIN.

English

15c. Representation and Gender. Fall 1992. Ms. SUDAN.

25c. The Politics of Sexuality. Spring 1993. Ms. SUDAN.

251c. The Romantic Novel. Every other year. Fall 1993. MR. COLLINGS.

252c. The Victorian Novel. Every other year. Spring 1994. MR. LITVAK.

[261c. Twentieth-Century British Fiction.]

270c. American Literature to 1860. Every other year. Fall 1992.

Ms. DIEHL.

271c. American Literature 1860–1917. Every other year. Spring 1993.

Ms. GOODRIDGE.

275c,d. African-American Fiction by Women. Fall 1992. Ms. SUDAN.

[276c,d. African-American Poetry.]

[280c. Women Writers in English.]

281c. Narrative. Fall 1992. MR. LITVAK.

300c. Literary Theory. Every other year. Fall 1993. MR. LITVAK.

344c. Modern Jewish-American Literature. Fall 1992. Ms. REIZBAUM.

Prerequisite: Consent of the instructor.

346c. Feminist Literary Theory and Criticism. Spring 1993. Ms. DIEHL.

Prerequisite: Consent of the instructor.

347c. The Star System: Performance and Celebrity in Mass Culture.

Spring 1993. MR. LITVAK.

Prerequisite: Consent of the instructor.

German

317c. German Literature since 1945. Fall 1992. Ms. O'CONNOR.

Prerequisite: **German 204** or equivalent.

History

11c. Women in Britain and America: 1750–1920. Fall 1994.

Ms. McMAHON.

246c. Women in American History, 1600–1900. Fall 1992.

Ms. McMAHON.

[247c. American Women in the Twentieth Century.]

248c. Family and Community in American History. Spring 1993.

Ms. McMAHON.

[249c. America's Working Women.]

[264c,d. Muslim Africa.]

321c. The Victorian Age. Spring 1993. Ms. TANANBAUM.

322c. Race, Gender, and Ethnicity in British Society. Fall 1994.

Ms. TANANBAUM.

331c. A History of Women's Voices in America. Fall 1993. Ms. McMAHON.

Prerequisite: **History 246** or **248**, or consent of the instructor.

Psychobiology

50a. Mind and Brain: Historical and Contemporary Issues. Every other year. Fall 1992. MR. ROSE.

Religion

10c. Adam and Eve and the Moral of the Story. Fall 1992.
Ms. MAKARUSHKA.

253c. Religion, Women, and Nature. Fall 1993. MS. MAKARUSHKA.

Romance Languages

319c. French Women Writers: Reading Women—Narrators, Heroines, Readers. Spring 1994. MS. DILLMAN.

Prerequisite: **French 209** or consent of the instructor.

Russian

222c. Topics Course: Women in Russian Society and Culture. Every other fall. Fall 1992. MS. KNOX.

Sociology

[203b. Families in American Society.]

219b. Sociology of Gender. Fall 1992. MS. RILEY.

Prerequisite: **Sociology 101** or **Anthropology 101** or consent of the instructor.

251b. Sociology of Health and Illness. Fall 1993. MS. BELL.

Prerequisite: **Sociology 101** or **Anthropology 101** or consent of the instructor.

252b. Sociology of Illness and Disability. Spring 1993. MS. BELL.

Prerequisite: **Sociology 101** or **Anthropology 101** or consent of the instructor.

Theater Arts: Division of Dance

101c. Introduction to Dance. Fall 1992. MS. VAIL.

Educational Resources and Facilities

HAWTHORNE-LONGFELLOW LIBRARY

The strength of a college library rests in its collections of books and other library materials and in the ability of its staff to make the library useful to students and faculty. Bowdoin's Nathaniel Hawthorne-Henry Wadsworth Longfellow Library is exceptionally strong. Totaling more than 785,000 volumes, its collections have been built up over a period of nearly 200 years and include an unusually large proportion of distinguished and valuable volumes. Similarly distinguished has been the roster of librarians of the College, a list that includes John Abbot, Calvin Stowe, Henry Wadsworth Longfellow, George T. Little, and Richard Barksdale Harwell.

The first books that belonged to the library—a set of the Count Marsigli's *Danubius Pannonica-Mysicus*, given to the College in 1796 by General Henry Knox (who had been a bookseller in Boston before he achieved fame as George Washington's chief ordnance officer)—are still a part of its collections. In the early decades of the nineteenth century, Bowdoin's library, largely because of extensive gifts of books from the Bowdoin family and the Benjamin Vaughan family of Hallowell, Maine, was one of the largest in the nation. The Bowdoin library has been maintained as one of the larger college libraries of the country, but its areas of growth are now defined by the curriculum of the College and restrained by the desirability of containing it as a collection to which students can have easy, and almost complete, access. In addition to its 785,000 volumes (a count that includes bound periodicals and newspapers), the library has a collection of approximately 60,000 maps, over 2,000 photographs, and more than 500,000 manuscript items. The current annual rate of acquisition is about 17,000 volumes, and the annual expenditure per student is more than \$1,375.

The majority of the collection is housed in Hawthorne-Longfellow Library. Material related to the sciences and mathematics was moved into the new Hatch Science Library in 1991. In addition, smaller, more specialized collections can be found in the art and music departments, and in the Language Media Center in Sills Hall. An online catalog, available through terminals in all the library buildings and elsewhere on campus by way of the College's computer network, provides readers with access to books and journals. Materials lent from the library are recorded on the automated circulation system, which provides users with up-to-date information on the circulation status of each volume. In addition, the on-line catalog gives users access to the catalog holdings of Colby and Bates Colleges' libraries and those of the campuses of the University of Maine.

The Hawthorne-Longfellow Library building was opened in the fall of 1965. The library occupies 60,000 square feet of floor space and will

eventually incorporate the 26,000 square feet presently used for the College's administrative offices. The library has seating for more than 565 readers, 500 of whom can be accommodated at individual study tables and carrels, and shelving to house all of its collections (with the exception of the rare materials in the Special Collections Suite) on open stacks. Study stations are dispersed throughout the building.

The entrance level of the building contains the portions of the library of most immediate use to its users: the circulation desk, both the card catalog and the computer catalog, the reference desk, reference books and bibliographies, current newspapers, current periodicals, periodical indexes, and two reading areas. The lower level of the library houses Bowdoin's extensive collection of bound periodicals, its collections of microfilm and other microforms, government documents, and the reserved reading shelves.

Special features of the second floor are an exhibit area and the President Franklin Pierce Reading Room, informally furnished and giving a broad view through floor-to-ceiling windows. The eastern end of the third floor is the Special Collections suite. This includes shelf space in a climate-controlled area for Bowdoin's rare books and manuscripts, and a reading room for their use.

Study space, both formal and informal, is available on all three floors of the library and in the Hubbard Hall stack area. Terminals for online catalog access are conveniently located throughout the building. In addition, there are 33 studies for faculty use.

The Hatch Science Library, opened in the spring of 1991, houses the College's science-related materials, including periodicals, microforms, maps, government documents, and indexes. The staff offers the full range of reference services to faculty and students. The building can accommodate more than 160 readers at individual carrels, study tables, and informal seating areas. Two seminar rooms, six faculty studies, and staff work areas are also provided.

The collections of the library are strong (though inevitably of varying strength) in all areas covered by the curriculum of the College, and a constant effort is maintained to ensure that representative publications in fields outside the current curriculum are added to the library. There is special strength in documentary publications relating to both British and American history, in the books relating to exploration and the arctic regions, in books by and about Carlyle, in books and pamphlets about Maine, in materials about the Huguenots, in books and pamphlets on World War I and on the history of much of middle Europe in this century, and in the literary history of pre-twentieth-century France.

The reference collection includes most of the English-language encyclopedias and a good representation in original editions of major foreign encyclopedias—from two editions of the monumental eighteenth-century *Encyclopédie* of Diderot to such modern works as the *Grand Larousse*

Encyclopédique, *Der Grosse Brockhaus*, the *Enciclopedia Universal Illustrada Europeo-Americana*, the *Bol'shaya Sovetskaya Entsiklopedia*, and the *Enciclopedia Italiana de Scienze, Lettere ed Arti*. In it also are the principal national bibliographies and other major bibliographical tools. Dispersed in their proper places throughout the collections are such distinguished sets as the *Studies and Documents* of the American Institute of Musicology in Rome, Armando Cortesão's *Portugaliae Monumenta Cartographia*, the elephant-folio edition of John James Audubon's *Ornithological Biography* (his "Birds of America"), E. S. Curtis's *The North American Indian*, the *Rerum Britannicarum Medii Aevi Scriptores*, Jacques Paul Migne's *Patrologiae* (Latina), the *Scriptores Rerum Germanicum*, Reuben Gold Thwaites's *Early American Travels*, and *The Victoria History of the Counties of England*. Scholarly sets include the publications of the Camden Society, the Early English Text Society, the Egypt Exploration Society, the Geological Society of America, the Hakluyt Society, the Henry Bradshaw Society, the Huguenot Society of London, the Prince Society, the Royal Historical Society, the Royal Society, the Scottish History Society, the Scottish Text Society, and the Société des Anciens Textes Français. Of comparable, or perhaps even greater, distinction is Bowdoin's collection of more than 100,000 bound volumes of periodical publications.

Special collections in the Hawthorne-Longfellow Library include extensive collections of books, manuscripts, and other materials by and about both Hawthorne and Longfellow; books and pamphlets collected by Governor James Bowdoin; the private library of James Bowdoin III; an unusually large collection of late-eighteenth- and early-nineteenth-century books (particularly in the sciences) collected by Maine's distinguished Vaughan family; books, periodicals, and pamphlets contemporaneous to the French Revolution; the books, papers, and memorabilia of the Abbott family; an unusually fine representation of the items published in the District of Maine and in the state during the first decade of its statehood; and the books printed by the three most distinguished presses in Maine's history: the Mosher Press, the Southworth Press, and the Anthoensen Press.

Also in the Special Collections suite are the printed items relating to the history of the College and the chief collections of manuscript archives of the College. These include much material on Bowdoin alumni and extend far beyond a narrow definition of official college records. Here also is the library's general collection of manuscripts. Outstanding among the manuscripts are the collections of the papers of Generals O. O. Howard and Charles Howard, of Senator William Pitt Fessenden, and of Professors Parker Cleaveland, Alpheus S. Packard, Henry Johnson, and Stanley Perkins Chase; collections of varying extent of most of Bowdoin's presidents, especially Jesse Appleton, Joshua L. Chamberlain, William DeWitt Hyde, and Kenneth Charles Morton Sills; manuscripts by Kenneth Roberts, Robert Peter Tristram Coffin, Kate Douglas Wiggin, Charles Stephens, Edwin Arlington Robinson, Elijah

Kellogg, and such contemporary authors as Vance Bourjaily, John Pullen, and Francis Russell.

The books and manuscripts in Bowdoin's special collections are not treated simply as museum pieces. They are open to use by scholars and serve an important function in introducing undergraduates—in their research projects and other independent work—to the variety of materials they can expect to work with if they go on to graduate work.

Special collections include also the Bliss collection of books on travel, on French and British architecture, and other fine books (miscellaneous in nature but largely relating to the history of art and architecture) that are housed in the extraordinarily handsome Susan Dwight Bliss Room in Hubbard Hall. These books are additionally distinguished by their fine bindings. The books in this room and the room itself (with its Renaissance ceiling that once graced a Neapolitan palazzo) were the gift of Miss Bliss in 1945.

In addition to its strong and diverse collections, the library provides several services designed to extend access to resources not held locally. Through a vigorous interlibrary loan program, the library assures the timely delivery of materials from the collections of Colby and Bates Colleges' libraries, and other libraries throughout the country and the world, to its users. Reference librarians search remote on-line indexes and full-text database services for responses to faculty and student queries not easily answered through the use of the library's own collections.

During term time, the library is open from 8:30 A.M. to midnight, Monday through Saturday, and on Sunday from 10:00 A.M. to midnight. When the College is not in session, the library is open from 8:30 A.M. to 5:00 P.M., Monday through Friday. Small departmental collections in art and music are housed contiguous to the offices of the departments and are available for use on separate schedules of opening.

The operations of the library and the growth of its collections are supported by the general funds of the College and by gifts from alumni and other friends of the library and the College. The library is annually the recipient of generous gifts of both books and funds for the immediate purchase of books or other library materials. It is always especially desirous of gifts of books, manuscripts, and family records and correspondence relating to the alumni of the College. The income of more than a hundred gifts to the College as endowment is directed to the use of the library.

LANGUAGE MEDIA CENTER

The Language Media Center, located in the basement of Sills Hall, supports the study of foreign languages by providing a fourteen-station Tandberg audio-active language laboratory; fifteen individual viewing stations for VHS, Beta, and 3/4-inch videocassettes (European and American standards); a shortwave receiving station; and four Macintosh microcomputer stations.

The center offers a group viewing area that accommodates up to thirty-five persons and a lobby area for informal viewing of live television transmitted from four satellite dishes located on the roofs of Morrell Gymnasium and Sills Hall. Students are able to watch live international television from these systems.

In addition, the Language Media Center provides an array of audio and video services, such as the high-speed duplication of audio tapes and the duplication of video tapes, cataloging and storage of audiovisual materials, and display of popular foreign-language newspapers and periodicals.

BOWDOIN COLLEGE MUSEUM OF ART

An art collection has existed at Bowdoin almost since the founding of the College. It came into existence through the 1811 bequest of James Bowdoin III and was one of the earliest to be formed in the United States. Bowdoin's gift consisted of two portfolios containing 141 old master drawings, among which was a superb landscape by Pieter Bruegel the Elder, and 70 paintings. A group of Bowdoin family portraits was bequeathed in 1826 by James Bowdoin III's widow, Sarah Bowdoin Dearborn. Through the years, the collection has been expanded through the generosity of alumni, College friends, and members of the Bowdoin family, and now numbers 12,000 art objects.

Although various parts of the College's art collection were on view during the first half of the nineteenth century, it was not until 1855 that a special gallery devoted to the collection came into being in the College Chapel. This gallery was made possible by a gift from Theophilus Wheeler Walker of Boston, a cousin of President Leonard Woods. It was as a memorial to Walker that his two nieces, Harriet Sarah and Mary Sophia Walker, donated funds in 1891 for the present museum building, designed by Charles Follen McKim of McKim, Mead & White. Four murals of Athens, Rome, Florence, and Venice by John La Farge, Elihu Vedder, Abbott Thayer, and Kenyon Cox, respectively, were commissioned to decorate the museum's rotunda.

The museum holds an important collection of American colonial and federal portraits, including works by Smibert, Feke, Blackburn, Copley, Stuart, Trumbull, and Sully. Among the five examples by Robert Feke is the full-length likeness of Brigadier General Samuel Waldo, generally regarded as the finest American portrait of the first half of the eighteenth century. The nine paintings by Gilbert Stuart include pendant portraits of Thomas Jefferson and James Madison. *Colonial and Federal Portraits at Bowdoin College*, published in 1966, describes this collection in detail.

The College's collection of ancient art contains sculpture, vases, terra cottas, bronzes, gems, coins, and glass of all phases of the ancient world. The most notable benefactor in this area was Edward Perry Warren, L.H.D. '26, the leading American collector of classical antiquities of the first quarter of the twentieth century. Five magnificent ninth-century B.C. Assyrian reliefs from

the Palace of Ashurnazirpal II, an acquisition facilitated for the College by Henri Byron Haskell M1855, are installed in the museum's rotunda. *Ancient Art in Bowdoin College*, published in 1964, describes these holdings.

The College has been the recipient of a Samuel H. Kress Study Collection of twelve Renaissance paintings; a large collection of medals and plaquettes presented by Amanda Marchesa Molinari; a fine group of European and American pictures and decorative arts given by John H. Halford '07 and Mrs. Halford; a collection of Chinese and Korean ceramics given by Governor William Tudor Gardiner, LL.D. '45, and Mrs. Gardiner; and a collection of nineteen paintings and 168 prints by John Sloan bequeathed by George Otis Hamlin.

The College's Winslow Homer Collection comprises paintings, drawings, prints, and memorabilia pertaining to the artist's career. The first painting by Homer to enter the museum, a watercolor entitled *The End of the Hunt*, was contributed by the Walker sisters from their personal collection. In the fall of 1964, a gift from the Homer family brought to Bowdoin the major portion of the memorabilia remaining in the artist's studio at Prout's Neck, letters written over a period of many years to members of his family, and photographs of friends, family, and Prout's Neck. A large collection of woodcuts was later purchased to augment these holdings and to create a center for the scholarly study of the life and career of this important American artist.

In the late 1960s and early 1970s, the museum acquired through gift and purchase a survey collection of paintings, drawings, and prints by the American artist and illustrator Rockwell Kent.

The permanent collections also contain fine examples of the work of such nineteenth-century and twentieth-century American artists as Martin Johnson Heade, Eastman Johnson, George Inness, Thomas Eakins, John Singer Sargent, William Glackens, Marsden Hartley, Jack Tworckov, Arshile Gorky, Franz Kline, Andrew Wyeth, D.F.A. '70, Leonard Baskin, and Alex Katz.

In 1982, the museum published *Handbook of the Collections*, dedicated to the memory of John H. Halford '07. In 1985, a comprehensive catalogue of the College's permanent collection of old master drawings was published. *The Architecture of Bowdoin College*, an illustrated guide to the campus by Patricia McGraw Anderson, was published in 1988.

In addition to exhibitions of the permanent collections, the museum schedules an active program of temporary exhibitions of art lent by institutions and private collectors throughout the United States. Among the important shows organized by the museum in recent years have been Treasures from Near Eastern Looms; Winslow Homer Watercolors; Old Master Drawings at Bowdoin College; Alex Katz: Small Paintings; Yvonne Jacquette: Tokyo Nightviews; Makers '86 (a juried biennial exhibition of Maine crafts); Twilight of Arcadia: American Landscape Painters in Rome 1830-1880; New England Now: Contemporary Art from Six States; Thomas Cornell Paintings: The Birth of Nature; From Dürer to Picasso: Five

Centuries of Master Prints from a Private Collection; and Katherine Porter: Paintings/Drawings.

The College lends art objects in the custody of the museum to other institutions throughout the United States and, occasionally, to institutions abroad. The museum also sponsors symposia and special lectures. Since 1973, symposia on American furniture, nineteenth-century decorative arts, American Indian art, art conservation, oriental rugs, American pewter, and American collegiate architecture have been held. During 1991–92, extensive programs of gallery talks and lectures were scheduled to complement two temporary loan exhibitions, *The Here and the Hereafter: Images of Paradise in Islamic Art* and *From Studio to Studiolo: Florentine Draftsmanship under the First Medici Grand Dukes*.

In 1985, the Associates Program merged with other special campus support groups to become the Association of Bowdoin Friends. Its participants have access to a wide variety of activities and programs sponsored by the museum. Another vital support group of sixty-eight volunteers conducts tours and assists the museum staff with clerical activities and educational programs.

The amount of space in the Walker Art Building more than doubled in 1976 following extensive renovation designed by Edward Larrabee Barnes. Two galleries for exhibiting the museum's permanent collection and two temporary exhibition galleries were added on the lower level. One of the new galleries was dedicated to the memory of John H. Halford '07; another, in memory of John A. and Helen P. Becker.

THE PEARY-MACMILLAN ARCTIC MUSEUM AND ARCTIC STUDIES CENTER

The Peary-MacMillan Arctic Museum was founded in honor of two famous arctic explorers and Bowdoin alumni, Admirals Robert E. Peary (Class of 1877) and Donald B. MacMillan (Class of 1898). On April 6, 1909, after a lifetime of arctic exploration, Peary became the first person to reach the North Pole. MacMillan was a crew member on that North Pole expedition. Between 1908 and 1954, MacMillan explored Labrador, Baffin Island, Ellesmere Island, and Greenland. Most of his expeditions were made on board the *Bowdoin*, a schooner he designed for work in ice-laden northern waters. MacMillan took college students on the expeditions and introduced them to the natural history and anthropology of the North. He was not the first to involve Bowdoin students in arctic exploration, however. In 1860, Paul A. Chadbourne, a professor of chemistry and natural history, had sailed along the Labrador and West Greenland coasts with students from Williams and Bowdoin.

The museum's collections include equipment, paintings, and photographs relating to the history of arctic exploration, natural history specimens, and artifacts and drawings made by Inuit and Indians of arctic North America.

The museum has large collections of ethnographic photographs and films recording past lifeways of Native Americans taken on the expeditions of MacMillan and Robert Bartlett, an explorer and captain who sailed northern waters for nearly fifty years. Diaries, logs, and correspondence relating to the museum's collections are housed in the Special Collections section of the Hawthorne-Longfellow Library.

The museum, established in 1967, is located on the first floor of Hubbard Hall. The building was named for General Thomas Hubbard of the Class of 1857, a generous benefactor of the College and financial supporter of Peary's arctic ventures. The museum's exhibitions were designed by Ian M. White, former director of the Fine Arts Museum of San Francisco, who sailed with MacMillan in 1950. Generous donations from members of the Class of 1925, together with gifts from George B. Knox of the Class of 1929, a former trustee, and other interested alumni and friends, made the museum a reality. Continued support from friends of the College, the Kane Lodge, and the Russell and Janet Doubleday Foundation have allowed the museum to continue to grow.

The Arctic Studies Center was established in 1985 as a result of a generous matching grant from the Russell and Janet Doubleday Foundation to endow the directorship of the center, in recognition of the Doubledays' close relationship to MacMillan. The center links the resources of the museum and library with teaching and research efforts, and hosts traveling exhibitions, lectures, workshops, and educational outreach projects. Through course offerings, field research programs, employment opportunities, and special events, the center promotes anthropological, archaeological, geological, and environmental investigations of the North.

ACADEMIC COMPUTING SERVICES

Academic Computing Services (ACS), a department of the Computing Center, manages Bowdoin's public computing laboratories, provides hardware and software services for faculty instructional and research activities, administers the College's discount purchase plans for computers, manages the one time-sharing system that is dedicated to academic work, provides network connections between Bowdoin and other institutions, and manages a hotline for questions and problems about computers.

ACS operates seven widely accessible labs for students, faculty, and staff. The main lab is in Hubbard 208. Apple Macintosh, IBM, and compatible microcomputers (all with hard disks), video terminals, and laser printers are available in the lab. "Bowdoin College Computing Services Overview and Introduction," available through ACS, contains detailed descriptions and policies.

Unlike other institutions that limit their users to one kind of computing system, ACS at Bowdoin believes the educational benefits of using different systems are well worth their added cost. Therefore, for students, faculty, and staff, ACS supports both Macintosh and IBM-compatible microcomputing

as well as Digital UNIX time-sharing. While individuals are free to work most of the time with the system they prefer, a particular course may require work on one specific system.

Students, faculty, and staff may purchase Apple Macintosh, IBM, and software products at a discount. College policy does not require students to own personal computers, although many do so. Students are encouraged to wait until the beginning or middle of the second year before purchasing a personal system. At that point, personal work-styles and departmental interests are more focused, and waiting ensures having a suitable system for the challenges of third-year and fourth-year work. In turn, ACS maintains adequate public facilities for all students who do not have their own systems.

The ACS time-sharing computer is a DEC System 5000 Model 200 with Ultrix (UNIX). Accounts are available to all students, faculty, and staff at no charge and offer a full range of electronic mail, editing, and other applications. Members of the College community can also use the On-Line Library Catalog System for the Bowdoin College libraries, and through it can search the libraries of Bates College, Colby College, and the University of Maine library system. (Dedicated terminals in the libraries also provide catalog access.)

Bowdoin has subscribed to the New England Academic and Research Network (NEARnet) to provide all members of the Bowdoin community the full range of international network services. The College's internet node name is BOWDOIN.EDU.

ACS staff monitor the campus computing hotline (available by telephone, ext. 3792), through which the campus community is encouraged to raise questions. The main offices of Academic Computing Services are located in Hubbard 208.

RESEARCH AND CONFERENCE FACILITIES

Banding Station at Coleman Farm

During the course of the academic year, students conduct field study in ornithology at a site three miles south of the campus, using a tract of College-owned land that extends to the sea. Numerous habitats of resident birds are found on the property, and it is a stopover point for many migratory species. Organized by students in 1975, the Coleman Farm Banding Station is equipped by the College and a generous neighbor, E. Christopher Livesay, and operates under the direction of the Department of Biology.

Bethel Point Marine Research Station

The College's marine research facility is located approximately 10 miles from the campus on a 17-acre parcel of land with considerable shore frontage. Two laboratories are situated on the land. All major coastal environments of Maine are represented in microcosm, offering a unique opportunity for study. In conjunction with the hydrocarbon research performed by Bowdoin's De-

partment of Chemistry, the staff of the Bethel Point facility studies the chemical and biological consequences of oil spills on marine environments. While much of this study has been performed at the station and other points on the Maine coast, Bowdoin research teams have investigated spills in France, Puerto Rico, and various locations along the eastern seaboard of the United States.

Bowdoin Scientific Station

The College maintains a field station at Kent Island, off Grand Manan, in the Bay of Fundy, New Brunswick, Canada, where qualified students can conduct fieldwork on biological problems. Kent Island, containing about 200 acres and several buildings, was presented to the College in 1935 by John Sterling Rockefeller.

Kent Island is a major seabird breeding ground and the home of various land birds. Its location makes it a concentration point for migrating birds in spring and fall. The famous Fundy tides create excellent opportunities for the study of marine biology. The terrestrial habitats are surprisingly varied for an island of this size.

No formal courses are offered at the station, but students from Bowdoin and other institutions are encouraged to select problems for investigation at Kent Island during the summer and to conduct fieldwork on their own initiative with the advice and assistance of the Department of Biology. Approved work at the station is acceptable for credit as independent study. Field trips of short duration to Kent Island are a feature of Bowdoin's courses in ecology and ornithology.

Faculty members and graduate students from numerous universities and colleges conduct research in biology at the Bowdoin Scientific Station. They help the undergraduate members of the station through informal instruction and as examples of experienced investigators at work.

Financial assistance for students conducting research at Kent Island is available from the Alfred O. Gross Fund (see page 261). Other funds that support the Bowdoin Scientific Station are the Kent Island Fund, the Heizaburo Saito Fund, the Minot Fund, and the Roy Spear Memorial Fund.

Breckinridge Public Affairs Center

The Breckinridge Public Affairs Center is a 23-acre estate on the tidal York River in southern Maine. The center includes a 25-room main house, a clay tennis court, and a 110-foot, circular, saltwater swimming pool. Owned and operated by Bowdoin College, the center is used for classes, seminars, and meetings of educational, cultural, and civic groups. Business and professional organizations also use the facility for planning sessions and staff development activities. River House, which accommodates 19 overnight guests, was designed by Guy Lowell in 1905 and is on the National Register of Historic Places. The estate was given to Bowdoin in 1974 by Marvin Breckinridge Patterson, whose husband was the Honorable Jefferson Patterson of St.

Leonard, Maryland. Named in honor of Mrs. Patterson's family, who built the house, the estate is available for use April 1 through July 25, and September 17 through Thanksgiving, each year.

Maine Public Broadcasting Corporation

The new Maine Public Broadcasting Corporation is the result of the merger of WCBB-TV, an organization that was founded and originally financed by Bowdoin College in collaboration with Bates and Colby Colleges, and the Maine Public Broadcasting Network, a group of radio and television stations created by the University of Maine system. The new organization coordinates and broadcasts public television and radio signals statewide, and is supported largely through the contributions of individuals, businesses, and state and federal grants. The mission of public broadcasting is to enhance educational opportunities for viewers and listeners throughout Maine. The president of Bowdoin College serves on the Board of Trustees.

LECTURESHIPS

The regular instruction of the College is supplemented each year by ten or twelve major lectures, in addition to lectures, panel discussions, and other presentations sponsored by the various departments of study and undergraduate organizations.

John Warren Achorn Lectureship (1928): The income of a fund established by Mrs. John Warren Achorn as a memorial to her husband, a member of the Class of 1879, is used for lectures on birds and bird life.

Charles F. Adams Lectureship (1978): The income of a fund established by the bequest of Charles F. Adams '12 is used to support a lectureship in political science and education.

Albert C. Boothby Memorial Fund (1977): The family and friends of Albert C. Boothby '29 established this fund, whose terms are to be established.

Tom Cassidy Lectureship (1991): The income of a fund established by the bequest of Thomas J. Cassidy '72 is used to support a lectureship in journalism.

Chemistry Lecture Fund (1939): This fund was established by a vote of the Governing Boards to support Department of Chemistry special lectures in chemistry.

Dan E. Christie Mathematics Lecture Fund (1976): Established by family, friends, colleagues, and former students in memory of Dan E. Christie '37, a member of the faculty for thirty-three years and Wing Professor of Mathematics from 1965 until his death in 1975, this fund is used to sponsor lectures under the auspices of the Department of Mathematics.

Annie Talbot Cole Lectureship (1907): This fund, established by Mrs. Calista S. Mayhew in memory of her niece, Mrs. Samuel Valentine Cole, is

used to sponsor a lectureship that contributes “to the ennoblement and enrichment of life by standing for the idea that life is a glad opportunity. It shall, therefore, exhibit and endeavor to make attractive the highest ideals of character and conduct, and also, insofar as possible, foster an appreciation of the beautiful as revealed through nature, poetry, music, and the fine arts.”

John C. Donovan Lecture Fund (1990): Established by colleagues, friends, and members of the Donovan family, through the leadership of Shepard Lee ’47, this fund is used to support a lecture in the field of political science under the sponsorship of the Department of Government.

Elliott Oceanographic Fund (1973): Established by the Edward Elliott Foundation and members of the Elliott family in memory of Edward L. Elliott, a practicing geologist and mining engineer who expressed a lifelong interest in science and the sea, this fund promotes oceanographic education, in its widest definition, for Bowdoin students. It is expected that at least part of the fund will be used to support the Elliott Lectures in Oceanography, which were inaugurated in 1971.

Alfred E. Golz Lecture Fund (1986): Established by Ronald A. Golz ’56 in memory of his father, this fund is used to support a lecture by an eminent historian or humanitarian to be scheduled close to the November 21 birthday of Alfred E. Golz.

Cecil T. and Marion C. Holmes Mathematics Lecture Fund (1977): Established by friends, colleagues, and former students to honor Cecil T. Holmes, a member of the faculty for thirty-nine years and Wing Professor of Mathematics, this fund is used to provide lectures under the sponsorship of the Department of Mathematics.

Lesbian and Gay Lectureship Fund (1992): Established by members of the Bowdoin Gay and Lesbian Alumni/ae Association, this fund is used to sponsor at least one lecture annually in the field of gay and lesbian studies.

Mayhew Lecture Fund (1923): Established by Mrs. Calista S. Mayhew, this fund is used to provide lectures on bird life and its effect on forestry.

Charles Weston Pickard Lecture Fund (1961): The income of a fund established by John Coleman ’22 in memory of his grandfather, a member of the Class of 1857, is used to provide a lecture in the field of journalism in its broadest sense. “By journalism is meant lines of communication with the public, whether through newspapers, radio, television, or other recognized media.” The lecture is given once every four years.

Kenneth V. Santagata Memorial Lecture Fund (1982): Established by family and friends of Kenneth V. Santagata ’73, this fund is used to provide at least one lecture each term, rotating in the arts, humanities, and social sciences, with lecturers to be recognized authorities in their respective fields, to present new, novel, or nonconventional approaches to the designated topic in the specified category.

Edith Lansing Koon Sills Lecture Fund (1962): This fund was established by the Society of Bowdoin Women to honor Mrs. Kenneth C. M. Sills, the wife of a former president of Bowdoin College.

The Harry Spindel Memorial Lectureship (1977): Established by the gift of Rosalynne Spindel Bernstein and Sumner Thurman Bernstein in memory of her father, Harry Spindel, as a lasting testimony to his lifelong devotion to Jewish learning, this fund is used to support annual lectures in Judaic studies or contemporary Jewish affairs.

The Jasper Jacob Stahl Lectureship in the Humanities (1970): Established by the bequest of Jasper Jacob Stahl '09, Litt.D. '60, this fund is used "to support a series of lectures to be delivered annually at the College by some distinguished scholarly and gifted interpreter of the Art, Life, Letters, Philosophy, or Culture, in the broadest sense, of the Ancient Hebraic World, or of the Ancient Greek World or of the Roman World, or of the Renaissance in Italy and Europe, or of the Age of Elizabeth I in England, or that of Louis XIV and the Enlightenment in France, or of the era of Goethe in Germany."

Tallman Lecture Fund (1928): Established by Frank G. Tallman, A.M. H'35, as a memorial to the Bowdoin members of his family, this fund is used to support a series of lectures to be delivered by persons selected by the faculty. In addition to offering a course for undergraduates, the visiting professor on the Tallman Foundation gives public lectures on the subject of special interest.

PERFORMING ARTS

Drama

The Division of Theater within the Department of Theater Arts is staffed by the director of theater and the technical director. The main thrust of its activities is in making possible extensive extracurricular participation in the theater. The student drama group, Masque and Gown, was founded in 1903.

Credit courses in acting, directing, and playwriting are taught by the director of theater. Lighting is taught by the technical director. Each year at least three major productions are produced by Masque and Gown on the stage of Pickard Theater. For many years, one production each season has been a musical. In March 1991, two student-written one-act musicals were presented to capacity houses. March 1992 saw a production of *Anything Goes*. One very popular production each year is usually a Shakespeare drama or classical play. There are about eleven different productions during the school year.

Pickard Theater, the generous gift in 1955 of Frederick William Pickard, LL.D., of the Class of 1894, includes a modern, 600-seat theater with proscenium stage equipped with a hemp and counterweight system for flying scenery and an electronic lighting control system. In addition, Memorial Hall contains a scene shop and, on the lower floor, the G.H.Q. Playwrights' Theater, a 100-seat, open-stage theater for experimental work by students.

Membership in Masque and Gown results from major work on one, or minor work on two, of the plays produced each season. An executive committee of undergraduates elected by the members consults with the director of theater to determine the program for each year, handles publicity of the club, and organizes the production work. Masque and Gown needs box-office workers, publicists, directors, designers, builders, painters, electricians, stage hands, and costumers, as well as actors, actresses, and playwrights.

One of the most important activities of the club has been its encouragement of playwriting. For close to sixty years, Masque and Gown has sponsored an annual student-written one-act play contest, with cash prizes. The contest is now underwritten by the generous gift of Hunter S. Frost '47.

Dance

The Division of Dance in the Department of Theater Arts evolved from the Bowdoin Dance Program, which began in 1971. Each year, the Bowdoin Dance Group, the student performing ensemble, presents an informal studio show in December and a major performance of student and faculty works in Pickard Theater in April. Students also perform at Parents Weekend in the fall and in the Museum of Art in May. Performances are strongly linked to participation in technique, repertory, and choreography classes, held in the dance studio at Sargent Gymnasium, but independent work is also presented.

A co-curricular, student-run performance group called VAGUE (an acronym for "Very Ambitious Group Under Experiment") performs as part of Bowdoin Dance Group concerts and in other shows on campus and off. VAGUE's faculty advisor is the director of dance, and the group shares the Division of Dance's costume collection and rehearsal space in the dance studio on the third floor of Sargent Gymnasium.

The studio provides a light and airy space with a suspended wood floor for classes and rehearsals. Dance concerts are sometimes presented in the studio, in addition to Pickard Theater, Kresge Auditorium, and the Museum of Art, as well as in unconventional spaces such as the squash courts and outside on the Quad.

Besides student and faculty performances, the Division of Dance sponsors visits by nationally known dance companies, choreographers, and critics for teaching residencies and performances. Often as part of the Bates-Bowdoin-Colby Dance Alliance, the program has sponsored performances that range from baroque dance and ballet to tap, modern, and performance art. A partial list includes, for baroque and ballet, the Court Dance Company of New York, the Ken Pierce Baroque Dance Company, and the Berkshire Ballet; for jazz and jazz-tap, Impulse Dance Company and the Copasetics; for modern forms, Meredith Monk, Douglas Dunn, Pauline Koner, Kei Takei, Pilobolus, Wendy Perron, Dana Reitz, Phoebe Neville, Susan Foster, Art Bridgman and Myrna Packer, Doug Varone, Johanna Boyce, Richard Bull Dance Company,

Jim Coleman/Terese Freedman, UMO Performance Ensemble, and Irène Hultman; and dance critics Laura Shapiro, Marcia B. Seigel, and Jill Johnston.

These professionals teach master classes and offer lecture/demonstrations as part of their visits to campus, and often are commissioned to create a piece especially for the Bowdoin dancers. During the fall of 1990, New York performance artist Dan Hurlin was in residence to teach two courses and perform "A Cool Million," his own award-winning work, with support from Mellon Foundation funds for curriculum enrichment. In the fall of 1992, the innovative Momix will perform and offer a master class.

Bowdoin Dancers participate regularly in the American College Dance Festival. In December 1991, *Sextet*, choreographed by Teaching Fellow Gwyneth Jones, was chosen for the New England region's Gala Performance at Bates College.

Music

Music performance at Bowdoin ranges from informal student repertory sessions to professional performances by visiting artists, and from solo recitals to large-scale performances for chorus and orchestra. Many ensembles, such as the Chamber Choir, Bowdoin Symphony Orchestra, College Chorale, and Concert Band, are part of the curricular program. Credit is also given for participation in the Brass Quintet, String Quartet, and Schola Cantorum, a small vocal ensemble drawn from the Chamber Choir. Other groups, such as the Polar Jazz Ensemble, are sponsored by students.

The Chamber Choir is a select group of approximately twenty-five singers that performs a wide variety of choral and soloistic music. Its repertoire includes music from the Middle Ages to the avant-garde, from jazz and folk to Bach and Brahms. Recent tours have taken the choir to Europe, Canada, New Orleans, and Puerto Rico. The Bowdoin College Chorale is a choral ensemble composed of students, faculty, staff, and community members. Recent performances by the Chorale include Brahms's *Liebeslieder Waltzes*, J. S. Bach's *Easter Oratorio*, and Fauré's *Requiem*.

The Bowdoin Symphony Orchestra is an auditioned ensemble also drawn from the community at large. Its performances include works from the standard repertoire, such as Mozart and Beethoven symphonies, as well as interesting, less well known works and premiers of new student compositions. The Concert Band often performs at campus ceremonies, such as James Bowdoin Day, and it also plays on-campus concerts of the standard repertoire and contemporary jazz arrangements.

Both early music and contemporary music receive considerable emphasis at Bowdoin, and the music department recently won a national award for its support of American music. Early music is furthered through a collection of early instruments, such as gambas, shawms, cornetti, and members of the lute family, as well as two harpsichords and a tracker-action organ, gift of Chester William Cooke III '57. Entire concerts are often devoted to a particular early-

music repertoire, such as that of the sixteenth-century Spanish court. Recent visiting early-music artists include the Tallis Scholars, Musica Antiqua Köln, and harpsichordist Igor Kipnis.

Contemporary music is supported by a recently updated electronic music studio, including Macintosh computers, digital mixers, and software synthesis. There are also frequent visits by guest composers such as Karel Husa, Pauline Oliveros, George Crumb, and Thea Musgrave, and a biennial festival of contemporary choral music. Student compositions are often heard on campus. The performance of American music has included visits by professional jazz ensembles such as the Billy Taylor Trio and the production of Otto Luening's opera *Evangeline*.

Other visiting artists in recent years have included the Los Angeles Piano Quartet, Joan Morris and William Bolcom, the Chinese Music Ensemble of New York, the Lydian String Quartet, and Kurt Ollmann. In addition to performing, the artists often teach master classes and hold discussions with students.

Bowdoin owns a collection of orchestral and band instruments and over twenty grand pianos available for use by students studying and performing music. Soloists and ensembles perform in a number of halls on campus, including the Gibson Recital Hall, Kresge Auditorium, Pickard Theater, and the Chapel, which houses a forty-five-rank Austin organ. Private instruction in piano, organ, harpsichord, voice, and all the major orchestral instruments is available.

Student Life

CAMPUS LIFE AT BOWDOIN COMBINES traditional features of the liberal arts college with modern facilities and a wide range of extracurricular programs. Within this framework, students are encouraged to develop their talents and capacities for leadership. Along with the library, laboratories, Museum of Art and Peary-MacMillan Arctic Museum, visual arts center, concert and lecture halls, Moulton Union, health center, and athletic facilities, the less tangible—but more important—intellectual resources of the College play a prominent part in the undergraduate experience. Art shows, lectures, concerts, films, dramatic productions, community service, student government, and student organizations all enrich the student's work within the formal curriculum.

RESIDENTIAL LIFE

The College provides several different arrangements for housing, ranging from traditional residence halls and the multi-story Coles Tower to small, “family-style” houses and apartments. Whatever the setting, student life at Bowdoin is governed by the College's Social Code and by the expectation that residents will display mutual respect and consideration. Students in College housing are expected to respect the rights and property of their fellow students and of the College, and to abide by College residence rules.

First-year students must reside in College-owned facilities and must participate in a meal plan offering either full board (19 meals) or full board without breakfast (14 meals). Most students dine at Moulton Union or Wentworth Hall. Students who request and accept room accommodations in the fall are obligated to pay a full academic year's rent for those accommodations. Students who live in campus dormitories or fraternities are required to maintain a regular board contract with the Centralized Dining Service. Students living in College apartments are not required to take a regular board contract.

Board of Proctors

The general comfort of residents, informal peer counseling, and the maintenance of order in the residence halls are the responsibility of student proctors selected from the sophomore, junior, and senior classes and appointed by the associate dean of students. Proctors live in College residences and play an important part in the residential life of the College. Proctors are trained to help new students become familiar with the resources and opportunities at Bowdoin. They assist in planning social activities, refer students to College services, and can explain Bowdoin policies and traditions.

Coeducational Fraternities

There are eight fully coeducational, recognized fraternities at Bowdoin.

Membership in the fraternities is open to all students. Approximately 40 percent of Bowdoin students join a fraternity at some time in their career at the College. About 180 students live in the houses. Other members live in College housing but frequently eat meals in their house dining rooms. Most of the houses are located adjacent to the campus and are independently owned and operated by alumni house corporations. All Bowdoin social and safety regulations apply to fraternity members and to the houses.

In May 1992, a vote of the Governing Boards reaffirmed the principles set forth in the 1988 Henry Report that required all Bowdoin fraternities to be fully coeducational by September 1991 or lose College recognition. The Boards vote prohibits single-sex fraternities and sororities at Bowdoin and confirms the College's commitment to coeducation.

For their members, fraternities are an important part of college life, providing a focus for social activities and enabling the sharing of educational concerns and daily living experiences. Membership affords students an opportunity to assume responsibilities in self-governance within the houses and offers exposure to the history and traditions of the fraternities and the College. The action of the Governing Boards assures that those advantages will be equally open to men and women students.

Religious Life

Religious activities at Bowdoin are organized by the students. In recent years, the Bowdoin Christian Fellowship, the Bowdoin Jewish Organization, the Canterbury Club, and the Newman Apostolate have been active on campus. Each has planned activities appropriate to its membership.

CODES OF CONDUCT

Honor System

Initiated by students, the Honor System places complete responsibility upon individual students for integrity in all academic work, including the use of the library. During registration, students sign a pledge signifying that they understand and agree to abide by the Bowdoin College Honor System. In so doing, students pledge to neither give nor receive unacknowledged aid in any academic undertaking. In the event that students witness a violation of the Honor System, they are obligated to take action consistent with their own sense of honor.

The task of instructing students about their responsibilities under the Honor System resides with the Student Judiciary Board, a five-member body that also conducts hearings and recommends action to the dean in the event of a reported violation. Currently under review by the Student Executive Board, the provisions and administration of the Honor System and other explanatory information are published in the *Bowdoin College Student Handbook*.

Social Code

The responsibility for creating a harmonious community among students with different backgrounds and conflicting personal values rests, in large part, with students themselves. Conflicts that cannot be resolved informally are adjudicated through the Bowdoin College Social Code. This unique code of conduct resulted from the cooperative efforts of faculty and students, and it governs undergraduate behavior at the College. The Social Code requires that all students conduct themselves in accordance with local, state, and federal laws. It protects the rights of all students to privacy and to full participation in the life of the College community. In residences, in particular, the Code stipulates that the quiet necessary for academic pursuits will prevail.

As with the Honor Code, students must subscribe to the Social Code at registration. The code states that “the success of the Social Code requires the active commitment of all members of the community to the principles on which life at Bowdoin is based.” When instances of suspected misconduct occur, the code recommends an informal resolution, initially. Persistent and serious violations of this Social Code may be brought to the attention of the dean of students and to the Student Judiciary Board. Specific provisions and administration of the Social Code, as well as the College’s policies on illegal drugs, alcohol, and sexual harassment, are found in the *Student Handbook*.

STUDENT GOVERNMENT

All students enrolled at the College are members of the Student Assembly. A candidate for office must present a petition signed by at least fifty students in order to be eligible to run. Elections are held each fall. The Executive Board thus chosen consists of fifteen regular members and fifteen members at large, who appoint their officers for the duration of the academic year.

The Executive Board meets weekly and is charged with presenting student opinion to the administration; overseeing all chartered student organizations; maintaining standing committees, including the Student Judiciary Board, which administers the Honor Code Constitution and the provisions of the Social Code; filling student positions on faculty and Governing Boards committees; and supervising class officer elections.

STUDENT SERVICES

The College provides a variety of services designed to promote the physical and psychological well-being of its students and to advance their occupational interests.

Career Services

The Office of Career Services (OCS) complements the academic mission of the College. Career counselors strive to increase students’ awareness of the skills they are developing through a liberal arts education and the applicability of these skills to a wide range of career options.

A major goal of OCS is to introduce undergraduates and alumni/ae to the process of career planning, which includes self-assessment, career exploration, goal-setting, and the development of an effective job search strategy. Students are encouraged to visit OCS early during their college years for counseling and information on internships and summer jobs. OCS assists seniors in their transition to work or graduate study and prepares them to make future career and life decisions.

A staff of four is available for individual career counseling. Workshops and presentations provide assistance in identifying skills, writing resumes, preparing for interviews, and refining job-hunting techniques. Panel discussions and informational meetings throughout the year are designed to broaden students' awareness of their career options and to enhance their understanding of the job market. Information and advisement is offered regarding graduate and professional school study as well. In counseling style and program content, OCS addresses the needs of those with diverse interests, attitudes, and expectations.

Each year, nearly 40 companies, 60 graduate and professional schools, and a significant number of secondary schools and nonprofit employers participate in on-campus recruiting programs. Bowdoin is also a member of interviewing consortia in Maine, Boston, and New York City. The office subscribes to more than a dozen periodicals listing current job opportunities, and houses information on more than 1,000 summer and semester internships.

Career Services continually updates an alumni/ae advisory network and two resource centers, located in the Moulton Union and in the Department of Education. A weekly newsletter publicizes all OCS events and programs in addition to internship and job openings.

Health Services

The Dudley Coe Health Center provides medical and nursing services to students on a walk-in basis, Monday through Friday, from 8:00 A.M. to 8:00 P.M., and Saturday and Sunday, from 1:00 P.M. to 5:00 P.M. Complete gynecologic services are available by appointment. The health center holds a weekly orthopedic clinic and provides diagnostic X-ray services. Physicians, registered nurses, a physician's assistant, a nurse practitioner, and a radiologic technologist work together to staff the student health services.

The Dudley Coe Health Center works closely with the local medical community and area hospitals to provide comprehensive health care to all Bowdoin students.

Counseling Service

The Counseling Service is staffed by experienced mental health professionals (trained in psychology, social work, or counseling) who are dedicated to helping students resolve personal and academic difficulties and maximize

their psychological and intellectual potential. The counseling staff assists students with concerns about anxiety, depression, academic pressure, family conflicts, roommate problems, alcohol and drug use, date rape, eating disorders and body image, sexuality, intimate relationships, and many other matters. In addition to providing individual and group counseling, the staff conducts programs and workshops and provides training and consultation for the Bowdoin community. When appropriate, counselors may refer students to a consulting psychiatrist for evaluation or monitoring of psychoactive medication. The Counseling Service maintains a particularly strong commitment to promoting diversity and enhancing cross-cultural understanding. One of the counselors (Ms. Betty Thompson) acts as a multicultural consultant and devotes a significant portion of her time to addressing the concerns of students of color on the Bowdoin campus.

Students may schedule a counseling appointment by calling ext. 3145 or stopping by the office in person. Regular hours are from 8:30 A.M. to 5:00 P.M., Monday through Friday. A walk-in "emergency" hour is set aside each weekday from 4:00 P.M. to 5:00 P.M. for any student who may be experiencing a personal crisis that warrants immediate attention. After hours and on weekends, students may reach an on-call counselor for emergency consultation by coming to or calling the Dudley Coe Health Center (ext. 3236) or by calling Security (ext. 3314) when the Health Center is closed.

Counseling Service counselors also provide brief counseling and referral services to all Bowdoin employees through the College's Employee Assistance Program (EAP). Employees may call the Counseling Service to schedule an appointment during regular hours, or may arrange to see an off-campus EAP counselor (Anne Funderburk, L.C.S.W.) by calling 729-7710.

The Counseling Service offices are located on the third floor of the Dudley Coe Health Center.

Security

Bowdoin maintains a staff of trained, uniformed security officers who are on duty 24 hours a day to respond to emergencies and to maintain a regular patrol of the campus. Assistance can be summoned by using the College telephone system. The Communications Center of the Security Office is open 24 hours a day at extension 3314 for information. For emergencies, call extension 3500 or 725-3500.

A free shuttle service operates from 7:30 P.M. to 11:00 P.M., Sunday through Thursday, and from 7:30 P.M. to 2:00 A.M., Friday and Saturday, during the academic year. The service is "on demand," and students must call extension 3314 or 725-3314 for a ride. After 2:00 A.M., students may call the same number, and transportation will be provided by a Security vehicle. Students are encouraged to use the service, which provides transportation within campus and to the outskirts of campus.

ATHLETICS AND PHYSICAL EDUCATION

Bowdoin believes that physical education is an important part of the total educational program. The Department of Athletics provides students with opportunities for satisfying experiences in physical activities for the achievement of health and physical fitness. The physical education program includes classes that emphasize instruction in sports activities with carry-over value, intramural athletics, and intercollegiate competition. Students are encouraged to use the athletic facilities to participate in free recreational play.

Intercollegiate Athletics

During the past year, Bowdoin offered intercollegiate competition in the following varsity sports: Men's teams were fielded in baseball, basketball, cross country, football, hockey, lacrosse, skiing, soccer, squash, swimming, tennis, and track (winter and spring); women's teams were fielded in basketball, cross country, field hockey, ice hockey, lacrosse, skiing, soccer, softball, squash, swimming, tennis, track (winter and spring), and volleyball; coed teams were offered in golf and sailing. Junior varsity teams are maintained in a few intercollegiate sports.

Club Sports

The following club sports are active at Bowdoin: crew, rugby, water polo, and tae kwon do.

Physical Education

The instructional program includes a wide variety of activities utilizing campus and off-campus facilities, both natural and man-made. The activities have been selected to provide the Bowdoin community (students, faculty, and staff members) with the opportunity to receive basic instruction in exercises and leisure-time activities. It is hoped that participants will develop these activities into lifelong commitments. The program varies from year to year to meet current interests.

Intramural Athletics

Men's, women's, and coeducational leagues at the novice, intermediate, and advanced levels are offered in basketball, box lacrosse, touch football, ultimate frisbee, hockey, outdoor soccer, softball, indoor and outdoor volleyball, and water basketball. All students and members of the faculty and staff are eligible to participate in the intramural program unless they are playing for a corresponding varsity, junior varsity, or club team.

Outdoor Facilities

The outdoor athletic facilities of the College are excellent. Whittier Field is a tract of 5 acres that is used for football games and also includes a 400-meter, all-weather track. It has a grandstand with team rooms beneath it. Pickard Field is a tract of 35 acres that includes baseball and softball diamonds;

spacious playing fields for football, lacrosse, rugby, soccer, softball, and touch football; eight tennis courts; and a cross-country ski track.

Indoor Facilities

The College possesses indoor facilities that are the equal of its outstanding outdoor facilities. Morrell Gymnasium contains a modern basketball court with seats for about 2,000 persons; two visiting team rooms; 11 squash courts; a locker room with 480 lockers; shower facilities; a modern, fully equipped training room; offices for the director of athletics and his staff; and other rooms for physical education purposes. Sargent Gymnasium includes a weight-training room, a Nautilus room, a special exercise room, a regulation basketball court, a training room, and locker rooms with 470 lockers. The William Farley Field House contains a 200-meter, 6-lane track, a weight room, and four tennis courts adjacent to a 114-by-75-foot, 16-lane pool with one 3-meter and two 1-meter diving boards; a trainers' room; locker and equipment rooms; space for aerobics; and meeting rooms. Completing the athletic facilities is the Dayton Arena, which has a 200-by-85-foot refrigerated ice surface and seating accommodations for 2,600 spectators.

STUDENT ACTIVITIES

There are more than 60 active student organizations at Bowdoin, and additional groups are frequently being formed by students with similar interests. Among the oldest groups are the Outing Club, the *Orient*, and Masque and Gown, a student-run dramatic organization. For a complete list and descriptions of student organizations, please consult the *Student Handbook*.

Bowdoin recognizes excellence not only in the classroom, but on the playing field and in the community as well. For a complete list of awards granted in various areas, please see the appendix "Prizes and Distinctions," page 253–66.

The Moulton Union is the center of student activity planning. It contains the Information Center, the bookstore, Student Executive Board headquarters, lounges, the Bear Necessity (coffee house-pub), the mailroom, meeting rooms, the Bear Buns Café, an on-campus travel agency, the WBOR broadcasting station, and other facilities. The offices of the director of the Moulton Union, the director of events, the student activities coordinator, and Career Services are located in the Union.

Alumni Organizations

Alumni Association

The Bowdoin College Alumni Association has as its purpose "to further the well-being of the College and its alumni by stimulating the interest of its members in the College and each other through the conduct of programs by and for alumni." Membership is open to former students who during a minimum of one semester's residence earned at least one academic credit toward a degree, to those holding Bowdoin degrees, and to anyone elected to membership by the Executive Committee of the Alumni Council.

Alumni Council

Officers: Bruce Locke '68, president; David M. Cohen '64, vice president; Heather T. Kenvin Hietala '83, secretary and treasurer.

Members-at-Large. Terms expire in 1993: Sally Clayton Caras '78, Bruce Locke '68, John M. Mackenzie '69, J. Ward Stackpole '50. Terms expire in 1994: David M. Cohen '64, Molly Hoagland King '80, Gregory V. McQuater '72, Steven H. Hughes '79. Terms expire in 1995: Maurice A. Butler '74, Iris W. Davis '78, Harper Sibley III '76, Paul H. Wiley '71. Terms expire in 1996: David B. Klingaman '62, Robert L. Morrell '47, Robert V. Peixotto '77, John A. Woodcock, Jr. '72.

Other members of the council are the editor of *Bowdoin* magazine, a representative of the faculty, the secretary of the College, the director of Annual Giving, the directors of the Alumni Fund, representatives of recognized alumni clubs, one member of the Afro-American Alumni Council, and three undergraduates.

Alumni Council Awards

Alumni Service Award: First established in 1932 as the Alumni Achievement Award and renamed the Alumni Service Award in 1953, this award is made annually to the person who, in the opinion of alumni, as expressed by the Alumni Council, best represents the alumnus or alumna whose services to Bowdoin most deserve recognition.

The recipient in 1992 was Timothy M. Warren '45.

Alumni Award for Faculty and Staff: Established by the Alumni Council in 1963, it is presented each year "for service and devotion to Bowdoin, recognizing that the College in a larger sense includes both students and alumni." The award is made at the annual Homecoming Luncheon in the fall and consists of a Bowdoin clock and a framed citation.

The recipient in 1992 was Betty L. Massé.

Distinguished Bowdoin Educator Award: Established in 1964 to recognize outstanding achievement in education by a Bowdoin alumnus, except

alumni who are members of the Bowdoin faculty and staff, the award consists of a framed citation and \$500. In 1985, the council voted to honor achievement both at the college/university level and at the primary/secondary level.

The recipients in 1992 were Milton M. Gordon '39 at the college/university level and, at the primary/secondary level, John P. Brennan '74.

Bowdoin Magazine

Established in 1927, the quarterly *Bowdoin* magazine publishes articles of general interest about the College and its alumni. It is sent without charge to all alumni, seniors, parents of current students and recent graduates, faculty and staff members, and various friends of the College.

Other alumni publications include *The Whispering Pines* and various newsletters.

Bowdoin Alumni School and Interviewing Committees (BASIC)

BASIC is a volunteer association of approximately 500 alumni in the United States and several foreign countries which assists the Admissions Office in the identification and evaluation of candidates. BASIC responsibilities include providing alumni interviews for applicants when distance or time precludes a visit to Brunswick, representing the College at local "college fair" programs, and, in general, serving as liaison between the College and prospective students.

Those interested in learning more about the BASIC organization should contact the Admissions Office.

Alumni Fund

The Alumni Fund, inaugurated in 1869 and reorganized in 1919 and 1983, has as its principal task the raising of unrestricted or currently expendable (budget-relieving) funds for current purposes. In 1990-91 the Fund total was \$2,967,687, with 58% of the alumni participating.

Officers: I. James W. MacAllen '66, chair; Harry L. Silverman '64, vice chair.

Directors: I. James W. MacAllen '66 (term expires in 1993), Harry L. Silverman '64 (term expires in 1994), David Z. Webster '57 (term expires in 1995), Elizabeth K. Glaser '81 (term expires in 1996), Kenneth M. Cole III '69 (term expires in 1997).

Alumni Fund Awards

Alumni Fund Cup: Awarded annually since 1932, the Alumni Fund Cup recognizes the Reunion Class making the largest contribution to the Alumni Fund, unless that Reunion Class wins the Babcock Plate; in that event, the non-Reunion Class with the most money in the Fund is awarded the cup.

The recipient in 1991 was the Class of 1957, David Z. Webster, agent.

Leon W. Babcock Plate: Presented to the College in 1980 by William L. Babcock, Jr. '69, and his wife, Suzanne, in honor of his grandfather, Leon W. Babcock '17, it is awarded annually to the class making the largest dollar contribution to the Alumni Fund.

The recipient in 1991 was the Class of 1956, Norman P. Cohen, agent, and Ronald A. Golz and Paul G. Kirby, special gifts chairmen.

Class of 1916 Bowl: Presented to the College by the Class of 1916, it is awarded annually to the class whose record in the Alumni Fund shows the greatest improvement over its performance of the preceding year.

The recipient in 1991 was the Class of 1966, Douglas C. Bates, agent, and James W. MacAllen, special gifts chairman.

Class of 1929 Trophy: Presented by the Class of 1929 in 1963, it is awarded annually to that one of the ten youngest classes attaining the highest percentage of participation.

The recipient in 1991 was the Class of 1989, Todd M. Greene, Kathleen E. McKelvey, and Todd J. Remis, co-agents.

Robert Seaver Edwards Trophy: Awarded annually to that one of the ten youngest classes raising the most money for the Fund, this trophy honors the memory of Robert Seaver Edwards, Class of 1900.

The recipient in 1991 was the Class of 1981, Mary Kate Devaney Barnes, Thomas M. Keydel, Elizabeth Sanborn Ventre, co-agents, and Robert L. Paplow, Jr., special gifts chairman.

Fund Directors' Trophy: Established in 1972 by the directors of the Alumni Fund, the trophy is awarded annually to the class which, in the opinion of the directors, achieved an outstanding performance not acknowledged by any other trophy.

The recipient in 1991 was the Class of 1941, Charles E. Hartshorn, Jr., agent, and Rupert Neily, special gifts chairman.

\$100,000 Club: Established by the directors in 1989 and retroactive to the Fund year 1984-85, the \$100,000 Club recognizes each class agent who for the first time has led his or her class over the \$100,000 figure during a Fund year.

The recipients in 1991 were Norman P. Cohen '56, agent, and Ronald A. Golz '56 and Paul G. Kirby '56, special gifts chairmen; David Z. Webster '57, agent; Douglas C. Bates '66, agent, and James W. MacAllen '66, special gifts chairman; Leo T. Guen '76 and Stephen P. Maidman '76, co-agents, and J. Taylor Crandall '76, special gifts chairman.

Robert M. Cross Awards: Established by the directors in 1990, the Robert M. Cross Awards are awarded annually to those class agents whose outstanding performance, hard work, and loyalty to Bowdoin, as personified by Robert M. Cross '45 during his many years of association with the Fund, are deserving of special recognition.

The recipients in 1991 were Louis Bernstein '22, Samuel A. Ladd, Jr. '29, Richard C. Bechtel '36, Charles E. Prinn III '61, Douglas C. Bates '66, and Leo T. Guen '76.

The President's Cup for Alumni Giving

Established by the Development Committee of the Governing Boards in 1985, two cups are awarded annually—one for classes out of college forty-nine years or less, and one for classes out of college fifty years or more. The awards are presented on the basis of the total giving effort of a class, with all gifts actually received by or for the benefit of the College during the academic year eligible.

The recipients in 1991 were the Class of 1950 and the Class of 1922.

Society of Bowdoin Women

The Society of Bowdoin Women was formed in 1922 to provide “an organization in which those with a common bond of Bowdoin loyalty may, by becoming better acquainted with the College and with each other, work together to serve the College.”

The Society of Bowdoin Women continues to adapt its focus to support the changing needs of the College. The Edith Lansing Koon Sills Lecture Fund, established in 1961, is used to sponsor cultural, career, and literary speakers. The Society of Bowdoin Women Foundation, created in 1924, provided resources for the College's general use. With the inception of coeducation at Bowdoin in 1971, the Society decided to restrict the funds to provide annual scholarships to qualified women students and renamed it the Society of Bowdoin Women Scholarship Foundation. The Society of Bowdoin Women Athletic Award, established in 1978, recognizes effort, cooperation, and sportsmanship by a senior member of a women's varsity team. The Dorothy Haythorn Collins Award, created in 1985, honors a junior student exemplifying overall excellence and outstanding performance in his or her chosen field of study.

The Society's programs and activities are made possible by dues, contributions, and bequests. Membership is open to any interested person by payment of annual dues of \$3.00.

Officers: Kimberly Labbe Mills '82, president; Blythe Bickel Edwards, honorary president; O. Jeanne d'Arc Mayo, vice president; Heidi R. Davidson, secretary; Alison Johnson, treasurer; Pamela Phillips Torrey, assistant treasurer; Mary Scott Brownell, membership; Joan R. Shepherd, nominating.

Association of Bowdoin Friends

Founded in 1984, the Association of Bowdoin Friends is a volunteer group of Brunswick-area residents who share an interest in the well-being of the College. The Bowdoin Friends actively support the College library, museums, and music and athletics programs. Friends regularly attend lectures, concerts, and special programs on campus, and many audit classes. Activities

sponsored by the association include bus trips to New England museums, and receptions and dinners held in conjunction with presentations by Bowdoin faculty and students.

Bowdoin Friends contribute to the life of the College through orientation programs for new students and through the Host Family Program. Welcoming new students to campus and to Brunswick, the Friends provide information about the local area and day trips along the coast for first-year students. The Host Family Program pairs local families with international students, teaching fellows, and visiting faculty, as well as interested first-year students, easing the transition to College life and fostering lasting friendships. Through this program, international students and faculty are offered a taste of American life and culture.

A \$25 annual fee is required of all Bowdoin Friends who wish to receive copies of the College calendar and magazine.

Steering Committee: George D. Senter, chair; Robert S. Day, vice chair; Robert H. Brownell '49; Mary Elizabeth Carmen; John D. Chiquoine; Patricia C. Hill; Margaret Hutchins; Christine Millar; Gordon F. O'Donnell; James A. Storer.

Summer Programs

BOWDOIN COLLEGE SUMMER PROGRAMS provide an opportunity for a wide variety of people to enjoy the College's facilities and to benefit from the expertise of Bowdoin faculty and staff during the nonacademic portion of the year. Summer programs consist of educational seminars, professional conferences, sports clinics, specialized workshops, and occasional social events that are appropriate to the College's overall mission as an educational institution and as a member of the Maine community.

The longest-running summer program involving members of the Bowdoin faculty is the Infrared Spectroscopy course. Initiated at Massachusetts Institute of Technology in 1950, the program moved to Bowdoin in 1971. Over two thousand scientists have come to campus to work with the original staff who began the MIT program.

Upward Bound, in its twenty-seventh year at Bowdoin, is one of over 450 similar programs hosted by colleges across the country. Funded by the U.S. Department of Education, these programs have as their primary purpose the preparation of high school students from low-income families for entry into institutions of higher education.

Founded in 1964, the Bowdoin Summer Music Festival incorporates a music school, an artists' concert series, and the Gamper Festival of Contemporary Music during its six-week residency at Bowdoin College. Approximately 140 gifted performers of high school, college, and graduate school levels participate in a concentrated program of instrumental, chamber music, and composition studies with the Festival's faculty, which is composed of well-known teacher-performers from leading American conservatories.

In 1971 the College athletic department began offering the popular Summer Hockey Clinic, a hockey school with two-week sessions. Participants, ranging from nine to eighteen years old, come from throughout the United States to train with Bowdoin coaches as well as coaches from other colleges and academies with outstanding hockey programs.

Each year additional camps are offered by members of the athletic staff in tennis, basketball, soccer, lacrosse, and other sports. A day camp for children from six to fourteen years old is based in Farley Field House.

In addition to the four long-term College-sponsored programs described above, other programs brought to campus by Bowdoin faculty, staff, and outside associations attract several thousand people to the College each summer. Groups such as Elderhostel and many of the science conferences draw their participants on the strength of Bowdoin's reputation for an outstanding teaching faculty who share their talents with summer program guests.

Persons interested in holding a conference at Bowdoin should contact the

Office of Summer and Special Programs, which schedules all summer activities and coordinates dining, overnight accommodations, meeting space, audiovisual services, and other amenities.

Officers of Government

PRESIDENT OF THE COLLEGE

Robert Hazard Edwards, A.B. (Princeton), A.B., A.M. (Cambridge), LL.B. (Harvard), L.H.D. (Carleton), President of the College.

PRESIDENT AND TRUSTEES

John Francis Magee, A.B. (Bowdoin), M.B.A. (Harvard), A.M. (Maine), *Chair*. Elected Overseer, 1972; elected Trustee, 1979. Term expires 1995.

Rosalynne Spindel Bernstein, A.B. (Radcliffe), J.D. (Maine). Elected Overseer, 1973; elected Trustee, 1981. Term expires 1997.

Paul Peter Brountas, A.B. (Bowdoin), B.A., M.A. (Oxford), J.D., LL.B. (Harvard). Elected Overseer, 1974; elected Trustee, 1984. Term expires 2000.

Leonard Wolsey Cronkhite, Jr., A.B. (Bowdoin), M.D. (Harvard), LL.D. (Bowdoin, Northeastern), L.H.D. (Curry). Elected Overseer, 1969; elected Trustee, 1970. Term expires 1994.

Caroline Lee Herter. Elected Overseer, 1976; elected Trustee, 1988. First term expires 1996.

John Roscoe Hupper, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1970; elected Trustee, 1982. Term expires 1998.

Dennis James Hutchinson, A.B. (Bowdoin), M.A. (Oxford), LL.M. (Texas–Austin). Elected Overseer, 1975; elected Trustee, 1987. First term expires 1995.

Richard Allen Morrell, A.B. (Bowdoin). Elected Overseer, 1979. Elected Trustee, 1989. First term expires 1997.

Jean Sampson, A.B. (Smith). Elected Overseer, 1976; elected Trustee, 1986. First term expires 1994.

Carolyn Walch Slayman, A.B. (Swarthmore), Ph.D. (Rockefeller), Sc.D. (Bowdoin). Elected Overseer, 1976; elected Trustee, 1988. First term expires 1996.

Frederick Gordon Potter Thorne, A.B. (Bowdoin). Elected Overseer, 1972; elected Trustee, 1982. Term expires 1998.

Richard Arthur Wiley, A.B. (Bowdoin), B.C.L. (Oxford), LL.M. (Harvard). Elected Overseer, 1966; elected Trustee, 1981. Term expires 1997.

TRUSTEES EMERITI

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury). Elected Secretary, 1977; elected secretary of the president and trustees emeritus and overseer emeritus, 1991.

James Stacy Coles, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack). President of the College, 1952–1967; elected emeritus, 1977.

Sanford Burnham Cousins, A.B., LL.D. (Bowdoin). Elected Overseer, 1950; elected Trustee, 1959; elected emeritus, 1974.

David Watson Daly Dickson, A.B. (Bowdoin), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1966; elected Trustee, 1975; elected emeritus, 1982.

William Plummer Drake, A.M., LL.D. (Bowdoin). Elected Overseer, 1955; elected Trustee, 1970; elected emeritus, 1988.

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D. Litt. (Wesleyan), L.H.D. (Colby), L.H.D. (Bowdoin), L.H.D. (Bates), President of the College, 1981–1990; elected emeritus, 1990.

Merton Goodell Henry, A.B. (Bowdoin), LL.B. (George Washington), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1974; elected emeritus, 1987.

Roscoe Cunningham Ingalls, Jr., B.S. (Bowdoin). Elected Overseer, 1968; elected Trustee, 1973; elected emeritus, 1989.

William Curtis Pierce, A.B. (Bowdoin), LL.B. (Harvard), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1967; elected emeritus, 1981.

Everett Parker Pope, B.S., A.M., LL.D. (Bowdoin). Elected Overseer, 1961; elected Trustee, 1977; elected emeritus, 1988.

Winthrop Brooks Walker, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1966; elected Trustee, 1970; elected emeritus, 1986.

Robert H. Millar, A.B. (Bowdoin), B.Div. (Yale), *Secretary*. Elected 1991.

THE BOARD OF OVERSEERS

William Harris Hazen, A.B. (Bowdoin), J.D. (Harvard). *President*. Elected Overseer, 1981. Term expires 1993.

Marvin Howe Green, Jr. *Vice President*. Elected Overseer, 1985. Term expires 1997.

Thomas Hodge Allen, A.B. (Bowdoin), B.Phil. (Oxford), J.D. (Harvard). Elected Overseer, 1985. Term expires 1997.

- Walter Edward Bartlett**, A.B. (Bowdoin). Elected Overseer, 1990. First term expires 1996.
- David Pillsbury Becker**, A.B. (Bowdoin), A.M. (New York). Elected Overseer, 1986. Term expires 1998.
- Theodore Hamilton Brodie**, A.B. (Bowdoin). Elected Overseer, 1983. Term expires 1995.
- Tracy Jean Burlock**, A.B. (Bowdoin). Elected Overseer, 1990. First term expires 1996.
- George Hench Butcher III**, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1985. Term expires 1997.
- Thomas Clark Casey**, A.B. (Bowdoin), M.B.A. (Stanford). Elected Overseer, 1989. First term expires 1995.
- Kenneth Irvine Chenault**, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1986. Term expires 1998.
- J. Taylor Crandall**, A.B. (Bowdoin). Elected Overseer, 1991. First term expires 1997.
- Peter F. Drake**, A.B. (Bowdoin), Ph.D. (Bryn Mawr). Elected Overseer, 1992. First term expires 1998.
- Stanley F. Druckenmiller**, A.B. (Bowdoin). Elected Overseer, 1991. First term expires 1997.
- Frank John Farrington**, A.B. (Bowdoin), M.S. (The American College). Elected Overseer, 1984. Term expires 1996.
- Leon Arthur Gorman**, A.B., LL.D. (Bowdoin). Elected Overseer, 1983. Term expires 1995.
- Gordon Francis Grimes**, A.B. (Bowdoin), B.A. (Cambridge), J.D. (Boston). Elected Overseer, 1986. Term expires 1998.
- Kenneth David Hancock**, A.B. (Bowdoin). Elected Overseer, 1988. First term expires 1994.
- Laurie Anne Hawkes**, A.B. (Bowdoin), M.B.A. (Cornell). Elected Overseer, 1986. Term expires 1998.
- Judith Magyar Isaacson**, A.B. (Bates), A.M. (Bowdoin). Elected Overseer, 1984. Term expires 1996.
- Donald Richardson Kurtz**, A.B. (Bowdoin), M.B.A. (Columbia). Elected Overseer, 1984. Term expires 1996.
- Samuel A. Ladd III**, A.B. (Bowdoin). Elected Overseer, 1991. First term expires 1997.
- Diane Theis Lund**, A.B. (Stanford), J.D. (Harvard). Elected Overseer, 1985. Term expires 1997.
- George Calvin Mackenzie**, A.B. (Bowdoin), M.A. (Tufts), Ph.D. (Harvard). Elected Overseer, 1986. Term expires 1998.

Cynthia Graham McFadden, A.B. (Bowdoin), LL.B. (Columbia). Elected Overseer, 1986. Term expires 1998.

Robert H. Millar, A.B. (Bowdoin), B.Div. (Yale). Secretary of the President and Trustees, *ex officio*.

Campbell Barrett Niven, A.B. (Bowdoin). Elected Overseer, 1986. Term expires 1998.

David Alexander Olsen, A.B. (Bowdoin). Elected Overseer, 1986. Term expires 1998.

Michael Henderson Owens, A.B. (Bowdoin), M.D., M.P.H. (Yale). Elected Overseer, 1988. First term expires 1994.

Louis Robert Porteous, Jr., A.B. (Bowdoin), LL.D. (Portland School of Art). Elected Overseer 1982. Term expires 1994.

Hollis Susan Rafkin-Sax, A.B. (Bowdoin). Elected Overseer 1988. First term expires 1994.

Peter Donald Relic, A.B. (Bowdoin), A.M. (Case Western Reserve), Ed.D. (Harvard). Elected Overseer, 1987. First term expires 1993.

Linda Horvitz Roth, A.B. (Bowdoin), M.A. (University of North Carolina). Elected Overseer, 1992. First term expires 1998.

D. Ellen Shuman, A.B. (Bowdoin), M.S. (Yale). Elected Overseer, 1992. First term expires 1998.

Peter Metcalf Small, A.B. (Bowdoin). Elected Overseer, 1988. First term expires 1994.

Donald B. Snyder, Jr., A.B. (Bowdoin). Elected Overseer, 1992. First term expires 1998.

Terry Douglas Stenberg, A.B. (Bowdoin), Ed.M. (Boston University), Ph.D. (Minnesota). Elected Overseer, 1983. Term expires 1995.

Deborah Jean Swiss, A.B. (Bowdoin), Ed.M., Ed.D. (Harvard). Elected Overseer, 1983. Term expires 1995.

Mary Ann Villari, A.B. (Bowdoin), J.D. (Boston University). Elected Overseer, 1987. First term expires 1993.

William Grosvenor Wadman. Elected Overseer, 1988. First term expires 1994.

David Earl Warren, A.B. (Bowdoin), J.D. (Columbia). Elected Overseer, 1988. First term expires 1994.

Russell Bacon Wight, Jr., A.B. (Bowdoin). Elected Overseer, 1987. First term expires 1993.

Barry Neal Wish, A.B. (Bowdoin). Elected Overseer, 1989. First term expires 1995.

Elizabeth Christian Woodcock, A.B. (Bowdoin), A.M. (Stanford), J.D. (Maine). Elected Overseer, 1985. Term expires 1997.

Donald Mack Zuckert, A.B. (Bowdoin), LL.B. (New York University). Elected Overseer, 1987. First term expires 1993.

OVERSEERS EMERITI

Charles William Allen, A.B. (Bowdoin), J.D. (Michigan), LL.D. (Bowdoin). Elected Overseer, 1967; elected emeritus, 1976.

Willard Bailey Arnold III, A.B. (Bowdoin), M.S. (New York University). Elected Overseer, 1970; elected emeritus, 1984.

Charles Manson Barbour, A.B. (Bowdoin), M.D., C.M. (McGill). Elected Overseer, 1960; elected emeritus, 1977.

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury). Elected Secretary, 1977; elected secretary of the president and trustees and overseer emeritus, 1991.

Richard Kenneth Barksdale, A.B. (Bowdoin), A.M. (Syracuse), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1974; elected emeritus, 1986.

Robert Ness Bass, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1964; elected emeritus, 1980.

Louis Bernstein, A.B., LL.D. (Bowdoin). Elected Overseer, 1958; elected emeritus, 1973.

Gerald Walter Blakeley, Jr., A.B. (Bowdoin). Elected Overseer, 1960; elected emeritus, 1976.

Matthew Davidson Branche, A.B. (Bowdoin), M.D. (Boston University). Elected Overseer, 1970; elected emeritus, 1985.

John Everett Cartland, Jr., A.B. (Bowdoin), M.D. (Columbia). Elected Overseer, 1976; elected emeritus, 1988.

Norman Paul Cohen, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1977; elected emeritus, 1989.

Honorable William Sebastian Cohen, A.B. (Bowdoin), LL.B. (Boston University), LL.D. (St. Joseph, Maine, Western New England, Bowdoin, Nasson). Elected Overseer, 1973; elected emeritus, 1985.

Reverend Richard Hill Downes, A.B. (Bowdoin), S.T.B. (General Theological Seminary). Elected Overseer, 1970; elected emeritus, 1983.

Oliver Farrar Emerson II, A.B. (Bowdoin). Elected Overseer, 1974; elected emeritus, 1986.

William Francis Farley, A.B. (Bowdoin), J.D. (Boston College). Elected Overseer, 1980; elected emeritus, 1992.

- Roy Anderson Foulke**, B.S., A.M., LL.D. (Bowdoin). Elected Overseer, 1948; elected emeritus, 1973.
- Herbert Spencer French, Jr.**, A.B. (Bowdoin), M.B.A. (Pennsylvania). Elected Overseer, 1976. Elected emeritus, 1988.
- Paul Edward Gardent, Jr.**, B.S. (Bowdoin). Elected Overseer, 1975; elected emeritus, 1987.
- Albert Edward Gibbons, Jr.**, A.B. (Bowdoin). Elected Overseer, 1973; elected emeritus, 1985.
- Jonathan Standish Green**, A.B. (Bowdoin), M.B.A. (California). Elected Overseer, 1975; elected emeritus, 1987.
- Nathan Ira Greene**, A.B. (Bowdoin). Elected Overseer, 1964; elected emeritus, 1980.
- Peter Francis Hayes**, A.B. (Bowdoin), B.A., M.A. (Oxford), A.M., M.Phil., Ph.D. (Yale). Elected Overseer, 1969; elected emeritus, 1983.
- Regina Elbinger Herzlinger**, B.S. (Massachusetts Institute of Technology), D.B.A. (Harvard). Elected Overseer, 1983; elected emerita, 1989.
- Reverend Judith Linnea Anderson Hoehler**, A.B. (Douglass), M.Div. (Harvard), S.T.D. (Starr King School for the Ministry). Elected Overseer, 1980; elected emerita, 1992.
- William Dunning Ireland, Jr.**, A.B. (Bowdoin). Elected Overseer, 1971; elected emeritus, 1986.
- Lewis Wertheimer Kresch**, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1970; elected emeritus, 1983.
- Albert Frederick Lilley**, A.B. (Bowdoin), LL.B. (Virginia). Elected Overseer, 1976; elected emeritus, 1988.
- Herbert Mayhew Lord**, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1980; elected emeritus, 1992.
- Malcolm Elmer Morrell, Jr.**, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1974; elected emeritus, 1986.
- Robert Warren Morse**, B.S. (Bowdoin), Sc.M., Ph.D. (Brown), Sc.D. (Bowdoin). Elected Overseer, 1971; elected emeritus, 1986.
- Norman Colman Nicholson, Jr.**, A.B. (Bowdoin). Elected Overseer, 1979. Elected emeritus, 1991.
- John Thorne Perkin**, A.B. (Bowdoin). Elected Overseer, 1973; elected emeritus, 1985.
- Payson Stephen Perkins**, A.B. (Bowdoin). Elected Overseer, 1980; elected emeritus, 1986.
- Robert Chamberlain Porter**, A.B. (Bowdoin), LL.B. (Pennsylvania), LL.D. (Bowdoin). Elected Overseer, 1975; elected emeritus, 1987.

- Thomas Prince Riley**, A.B. (Bowdoin). Elected Secretary, 1955; elected emeritus, 1983.
- Alden Hart Sawyer**, B.S., LL.D. (Bowdoin). Elected Overseer, 1954; elected Treasurer, 1967; elected emeritus, 1979.
- Alden Hart Sawyer, Jr.**, A.B. (Bowdoin), M.B.A. (Michigan). Elected Overseer, 1976; elected emeritus, 1985.
- Robert Nelson Smith**, Lieutenant General (Ret.), B.S. (Bowdoin), LL.D. (Kyung Hee University). Elected Overseer, 1965; elected emeritus, 1978.
- John Ingalls Snow**, A.B. (Bowdoin), M.B.A. (Wharton). Elected Overseer, 1986; elected emeritus, 1992.
- Phineas Sprague**, A.B. (Bowdoin). Elected Overseer, 1985. Elected emeritus, 1992.
- Raymond Stanley Troubh**, A.B. (Bowdoin), LL.B. (Yale). Elected Overseer, 1978; elected emeritus, 1990.
- Lewis Vassor Vafiades**, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1973; elected emeritus, 1979.
- William David Verrill**, A.B. (Bowdoin). Elected Overseer, 1980; elected emeritus, 1986.
- Timothy Matlack Warren**, A.B. (Bowdoin). Elected Overseer, 1985; elected emeritus, 1991.
- George Curtis Webber II**, A.B. (Bowdoin). Elected Secretary, 1983; elected emeritus, 1986.
- Honorable Donald Wedgwood Webber**, A.B. (Bowdoin), LL.B. (Harvard), L.H.D. (Bates, Defiance), LL.D. (Bowdoin, Maine). Elected Overseer, 1962; elected emeritus, 1979.

Harry K. Warren, A.B. (Pennsylvania), *Secretary*. Elected Secretary, 1986.

COMMITTEES OF THE BOARDS

Joint Standing Committees*

Academic Affairs

Leonard W. Cronkhite, Jr., *Chair*; Stanley F. Druckenmiller, Robert H. Edwards, Gordon F. Grimes, Cynthia G. McFadden, Peter D. Relic, Linda H. Roth, Carolyn W. Slayman, T. Douglas Stenberg, Franklin G. Burroughs, Jr. (*faculty representative from the Faculty Affairs Committee*), one faculty member to be elected from the Curriculum and Educational Policy Committee, Hong Shen '94, Karin E. Stawarky '94, Bryan C. Thorp '95 (*alternate*), Charles R. Beitz, *staff liaison*.

Admissions and Financial Aid

Laurie A. Hawkes, *Chair*; Paul P. Brontas, George H. Butcher, Robert H. Edwards, Judith M. Isaacson, Donald R. Kurtz, Peter D. Relic, Jean Sampson, Mary Ann Villari, Richard A. Wiley, Robert R. Nunn (*faculty*), Daus Mahnhe '95, Richard C. Squire III '93, Crystal L. Dewberry '95 (*alternate*), Richard E. Steele, *staff liaison*.

Audit

Rosalyn S. Bernstein, *Chair*; Theodore J. Brodie, J. Taylor Crandall, Diane T. Lund, Deborah J. Swiss, Richard A. Wiley, Kent J. Chabotar, *staff liaison*.

Development

Donald M. Zuckert, *Chair*; Paul P. Brontas, Thomas C. Casey, Robert H. Edwards, Laurie A. Hawkes, John R. Hupper, Samuel A. Ladd, L. Robert Porteous, Jr., David E. Warren, Molly Hoagland King '80 (*alumni*), John L. Howland (*faculty*), Richard E. Morgan (*faculty*), Matthew A. Torrington '93, one student, William A. Torrey, *staff liaison*.

Executive

John F. Magee, *Chair*; Rosalyn S. Bernstein, Leonard W. Cronkhite, Jr., Robert H. Edwards, Frank J. Farrington, Laurie A. Hawkes, William H. Hazen, Richard A. Morrell, Campbell B. Niven, Carolyn W. Slayman, Barry N. Wish, Donald M. Zuckert, David M. Cohen '64 (*alumni*), Paul L. Nyhus (*faculty*), one student, Peter B. Webster (*secretary*).

Financial Planning

Campbell B. Niven, *Chair*; Kenneth I. Chenault, J. Taylor Crandall, Leonard W. Cronkhite, Jr., Robert H. Edwards, Marvin H. Greene, Jr., G. Calvin Mackenzie, Richard A. Morrell, David A. Olsen, Hollis Rafkin-Sax, Harper

*The president of the College is *ex officio* a member of all standing committees, except the Audit Committee.

Sibley '76 (*alumni*), R. Wells Johnson (*faculty*), Susan E. Wegner (*faculty*), James A. Hale '94, Jonathan M. Jenkins '94, Kent J. Chabotar, *staff liaison*.

Honors

William H. Hazen, *Chair*; Rosalyne S. Bernstein, Robert H. Edwards, Marvin H. Green, Jr., Dennis J. Hutchinson, G. Calvin Mackenzie, David E. Warren, Richard A. Wiley, Mark C. Wethli (*faculty*), one student, Richard A. Mersereau, *staff liaison*.

Investments

Barry N. Wish, *Chair*; Peter F. Drake, Stanley F. Druckenmiller, Robert H. Edwards, John R. Hupper, D. Ellen Shuman, Peter M. Small, Frederick G. P. Thorne, Russell B. Wight, Jr., C. Michael Jones (*faculty*), Aileen T. Daversa '94, Rebekah J. Smith '93 (*alternate*), Kent J. Chabotar, *staff liaison*.

Subcommittee on Social Responsibility

David P. Becker, *Chair*; Rosalyne S. Bernstein, C. Lee Herter, Donald R. Kurtz, Mary Ann Villari, Stephen T. Fisk (*faculty*), David J. Vail (*faculty*), one student, one student alternate, Kent J. Chabotar, *staff liaison*.

Nominating

Frank J. Farrington, *Chair*; Tracy J. Burlock, Robert H. Edwards, John R. Hupper, Campbell B. Niven, Frederick G. P. Thorne, John M. Mackenzie '69 (*alumni*), Christian P. Potholm (*faculty*), Justin M. Ziegler '95, Richard A. Mersereau and William A. Torrey, *staff liaisons*.

Physical Plant: Richard A. Morrell, *Chair*; Walter E. Bartlett, Robert H. Edwards, Leon A. Gorman, K. David Hancock, C. Lee Herter, Judith M. Isaacson, Peter M. Small, William G. Wadman, Elizabeth C. Woodcock, Arthur M. Hussey (*faculty*), A. Raymond Rutan (*faculty*), Derek J. Benner '94, V. Lauren Deneka '95, Kent J. Chabotar, *staff liaison*.

Student Affairs

Carolyn W. Slayman, *Chair*; Thomas H. Allen, Tracy J. Burlock, Robert H. Edwards, Dennis J. Hutchinson, Michael H. Owens, Jean Sampson, Donald B. Snyder, Jr., Sarah F. McMahon (*faculty*), Nathaniel T. Wheelwright (*faculty*), Joshua I. Klein '94, Timothy M. Smith '94, Bryan C. Thorp '95 (*alternate*), James E. Ward, *staff liaison*.

Subcommittee on Minority Affairs

George H. Butcher, *Chair*; Richard K. Barksdale, C. Lee Herter, Dennis J. Hutchinson, Deborah J. Swiss, Russell B. Wight, Jr., Daniel Levine (*faculty*), Feng Ding '95, Christopher J. Lee '95, James E. Ward and Betty C. Thompson, *staff liaisons*.

Staff Liaison to the Governing Boards: Richard A. Mersereau.

Secretary, President and Trustees: Robert H. Millar.

Secretary, Overseers: Harry K. Warren.

FACULTY REPRESENTATIVES

Trustees: Franklin G. Burroughs, Jr. (1993) and Paul L. Nyhus (1994).

Overseers: Craig A. McEwen (1995), David J. Vail (1995), and one faculty member to be elected by the Curriculum and Educational Policy Committee in September.

STUDENT REPRESENTATIVES

Trustees: Suzanne Gunn '93 and one student to be appointed.

Overseers: Michael D. Berkoff '95, Justin M. Ziegler '95, and one student to be appointed.

ALUMNI COUNCIL REPRESENTATIVES

Executive Committee: David M. Cohen '64.

Trustees: Sally Clayton Caras '78 and David M. Cohen '64.

Overseers: Iris W. Davis '78 and J. Ward Stackpole '50.

Officers of Instruction

- Robert Hazard Edwards**, A.B. (Princeton), A.B., A.M. (Cambridge), LL.B. (Harvard), L.H.D. (Carleton), President of the College. (1990)*
- Philip Conway Beam**, A.B., A.M., Ph.D. (Harvard), Henry Johnson Professor of Art and Archaeology Emeritus. (1936)
- Ray Stuart Bicknell**, B.S., M.S. (Springfield), Coach in the Department of Athletics Emeritus. (1962)
- James Stacy Coles**, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack), President of the College Emeritus. (1952)
- Louis Osborne Coxe**, A.B. (Princeton), Henry Hill Pierce Professor of English Emeritus. (1955)
- Edward Joseph Geary**, A.B. (Maine), A.M., Ph.D. (Columbia), hon. A.M. (Harvard), Henry Wadsworth Longfellow Professor of Romance Languages Emeritus. (1965)
- Arthur LeRoy Greason**, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D.Litt. (Wesleyan), L.H.D. (Colby), L.H.D. (Bowdoin), L.H.D. (Bates), President of the College and Professor of English Emeritus. (1952)
- Lawrence Sargent Hall**, A.B. (Bowdoin), A.M., Ph.D. (Yale), Henry Leland Chapman Professor of English Literature Emeritus. (1946)
- Paul Vernon Hazelton**, B.S. (Bowdoin), Ed.M. (Harvard), Professor of Education Emeritus. (1948)
- Ernst Christian Helmreich**, A.B. (Illinois), A.M., Ph.D. (Harvard), Thomas Brackett Reed Professor of History and Political Science Emeritus. (1931)
- Charles Ellsworth Huntington**, B.A., Ph.D. (Yale), Professor of Biology Emeritus and Director of the Bowdoin Scientific Station at Kent Island Emeritus. (1953)
- Myron Alton Jeppesen**, B.S. (Idaho), M.S., Ph.D. (Pennsylvania State), Professor of Physics and Josiah Little Professor of Natural Science Emeritus. (1936)
- Mortimer Ferris LaPointe**, B.S. (Trinity), M.A.L.S. (Wesleyan), Coach in the Department of Athletics Emeritus. (1969)
- Sally Smith LaPointe**, B.S.Ed. (Southern Maine), Coach in the Department of Athletics Emerita. (1973)

*Date of first appointment to the faculty.

Edward Thomas Reid, Coach in the Department of Athletics Emeritus. (1969)

Matilda White Riley, A.B., A.M. (Radcliffe), Sc.D. (Bowdoin), Daniel B. Fayerweather Professor of Political Economy and Sociology Emerita. (1973)

Thomas Auraldo Riley, A.B. (Bowdoin), A.M. (Yale), Ph.D. (Harvard), Professor of German Emeritus. (1939)

William Davis Shipman, A.B. (Washington), A.M. (California-Berkeley), Ph.D. (Columbia), Adams-Catlin Professor of Economics Emeritus. (1957)

William Bolling Whiteside, A.B. (Amherst), A.M., Ph.D. (Harvard), Frank Munsey Professor of History Emeritus. (1953)

John William Ambrose, Jr., A.B., A.M., Ph.D. (Brown), Joseph Edward Merrill Professor of Greek Language and Literature. (1966)

Shaheen Ayubi, A.B. (St. Joseph College, Karachi), A.M. (University of Karachi), Ph.D. (Pennsylvania), Assistant Professor of Government. (1988)

William Henry Barker, A.B. (Harpur College), Ph.D. (Massachusetts Institute of Technology), Professor of Mathematics. (1975)

Charles R. Beitz, A.B. (Colgate), M.A. (Michigan), M.A., Ph.D. (Princeton), Dean for Academic Affairs and Professor of Government. (1991)

Susan Elizabeth Bell, A.B. (Haverford), A.M., Ph.D. (Brandeis), Associate Professor of Sociology. (*On leave of absence for the fall semester.*) (1983)

John H. Blitz, B.A. (Alabama), M.S. (Southern Mississippi), Ph.D. (City University of New York), Visiting Assistant Professor of Anthropology. (1992)

Barbara Weiden Boyd, A.B. (Manhattanville), A.M., Ph.D. (Michigan), Associate Professor of Classics. (1980)

Bradford O. Bratton, B.S. (Oakland), M.S. (Northeastern), Ph.D. (Universität Regensburg), Visiting Assistant Professor of Biology. (1991)

Franklin Gorham Burroughs, Jr., A.B. (University of the South), A.M., Ph.D. (Harvard), Professor of English. (1968)

Samuel Shipp Butcher, A.B. (Albion), A.M., Ph.D. (Harvard), Professor of Chemistry. (1964)

Charles Joseph Butt, B.S., M.S. (Springfield), Coach in the Department of Athletics. (1961)

Helen Louise Cafferty, A.B. (Bowling Green), A.M. (Syracuse), Ph.D. (Michigan), William R. Kenan, Jr., Professor of German and the Humanities. (*On leave of absence for the academic year.*) (1972)

- John Calabrese**, B.A. (Georgetown), M.A. (New York), Ph.D. (London School of Economics), Visiting Assistant Professor of Government. (1991)
- Steven Roy Cerf**, A.B. (Queens College), M.Ph., Ph.D. (Yale), George Lincoln Skolfield, Jr., Professor of German. (1971)
- Kent John Chabotar**, B.A. (St. Francis College), M.P.A., Ph.D. (Syracuse), Vice President for Finance and Administration and Treasurer and Lecturer in Government. (1991)
- Nilanjana Chatterjee**, B.A. (Presidency College—Calcutta, India), M.A., Ph.D. (Brown), Visiting Assistant Professor of Anthropology. (1991)
- Ronald L. Christensen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Professor of Chemistry. (1976)
- David Collings**, A.B. (Pacific Union), A.M. (California-Riverside), Ph.D. (California-Riverside), A. LeRoy Greason Assistant Professor of English. (1987)
- Rachel Ex Connelly**, A.B. (Brandeis), A.M., Ph.D. (Michigan), Associate Professor of Economics. (*On leave of absence for the academic year.*) (1985)
- Denis Joseph Corish**, B.Ph., B.A., L.Ph. (Maynooth College, Ireland), A.M. (University College, Dublin), Ph.D. (Boston University), Professor of Philosophy. (1973)
- Thomas Browne Cornell**, A.B. (Amherst), Professor of Art. (*On leave of absence for the academic year.*) (1962)
- John D. Cullen**, A.B. (Brown), Assistant Director of Athletics and Coach in the Department of Athletics. (1985)
- Gregory Paul DeCoster**, B.S. (Tulsa), Ph.D. (Texas), Associate Professor of Economics. (1985)
- Deborah S. DeGraff**, B.A. (Knox College), M.A., Ph.D. (Michigan), Assistant Professor of Economics. (1991)
- Sara A. Dickey**, B.A. (Washington), M.A., Ph.D. (California-San Diego), Assistant Professor of Anthropology. (*On leave of absence for the fall semester.*) (1988)
- Patsy S. Dickinson**, A.B. (Pomona), M.S., Ph.D. (Washington), Associate Professor of Biology. (*On leave of absence for the fall semester.*) (1983)
- Joanne Feit Diehl**, A.B. (Mount Holyoke College), Ph.D. (Yale), Henry Hill Pierce Professor of English. (1988)
- Karin Dillman**, A.B. (Pädagogische Akademie), M.A. (University of San Diego), Ph.D. (California-San Diego), Assistant Professor of Romance Languages. (1987)
- Linda J. Docherty**, A.B. (Cornell), A.M. (Chicago), Ph.D. (North Carolina), Assistant Professor of Art History. (1986)

- Guy T. Emery**, A.B. (Bowdoin), A.M., Ph.D. (Harvard), Professor of Physics. (1988)
- Stephen Thomas Fisk**, A.B. (California-Berkeley), A.M., Ph.D. (Harvard), Professor of Mathematics. (1977)
- John M. Fitzgerald**, A.B. (Montana), M.S., Ph.D. (Wisconsin), Associate Professor of Economics. (1983)
- Maureen E. Flaherty**, A.B. (Williams), Coach in the Department of Athletics. (1992)
- Paul N. Franco**, B.A. (Colorado College), M.Sc. (London School of Economics), Ph.D. (Chicago), Assistant Professor of Government. (1990)
- Albert Myrick Freeman III**, A.B. (Cornell), A.M., Ph.D. (Washington), Professor of Economics. (1965)
- Alfred Herman Fuchs**, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Professor of Psychology. (1962)
- David K. Garnick**, B.A., M.S. (Vermont), Ph.D. (Delaware), Assistant Professor of Computer Science. (1988)
- William Davidson Geoghegan**, A.B. (Yale), M. Div. (Drew), Ph.D. (Columbia), Research Professor of Religion. (1954)
- Timothy J. Gilbride**, A.B. (Providence), M.P. (American International), Coach in the Department of Athletics. (1985)
- Jane C. Girdham**, B.Mus. (Edinburgh), M.A. (University College, Cardiff, Wales), Ph.D. (Pennsylvania), Assistant Professor of Music. (*On leave of absence for the spring semester.*) (1989)
- Jonathan Paul Goldstein**, A.B. (New York-Buffalo), A.M., Ph.D. (Massachusetts), Associate Professor of Economics. (1979)
- Celeste Goodridge**, A.B. (George Washington), A.M. (William and Mary), Ph.D. (Rutgers), Associate Professor of English. (1986)
- Robert Kim Greenlee**, B.M., M.M. (Oklahoma), D.M. (Indiana), Associate Professor of Music. (1982)
- Charles Alfred Grobe, Jr.**, B.S., M.S., Ph.D. (Michigan), Professor of Mathematics. (1964)
- Stephen A. Hall**, B.A. (Corpus Christi College, Oxford), M.Phil. (Warburg Institute, London University), M.A. (Princeton), Instructor in Classics. (1989)
- Takahiko Hayashi**, B.A. (Rikkyo University), M.E.S. (University of Tsukuba), Lecturer in Japanese. (1991)
- Barbara S. Held**, A.B. (Douglass), Ph.D. (Nebraska), Professor of Psychology. (*On leave of absence for the academic year.*) (1979)
- Mark Hineline**, B.A. (Southern Maine), M.A. (California-San Diego), Visiting Instructor in Physics. (1992)

- James Lee Hodge**, A.B. (Tufts), A.M., Ph.D. (Pennsylvania State), George Taylor Files Professor of Modern Languages and Professor of German. (1961)
- John Clifford Holt**, A.B. (Gustavus Adolphus), A.M. (Graduate Theological Union), Ph.D. (Chicago), Professor of Religion. (*On leave of absence for the spring semester.*) (1978)
- John LaFollette Howland**, A.B. (Bowdoin), Ph.D. (Harvard), Josiah Little Professor of Natural Science and Professor of Biology and Biochemistry. (1963)
- William Taylor Hughes**, B.S., A.M. (Indiana), Ph.D. (Northwestern), Professor of Physics and Astronomy. (*On leave of absence for the academic year.*) (1966)
- Arthur Mekeel Hussey II**, B.S. (Pennsylvania State), Ph.D. (Illinois), Professor of Geology. (1961)
- Janice Ann Jaffe**, A.B. (University of the South), A.M., Ph.D. (Wisconsin), Assistant Professor of Romance Languages. (1988)
- Amy S. Johnson**, B.A. (California-Los Angeles), Ph.D. (California-Berkeley), James R. and Helen Lee Billingsley Assistant Professor of Marine Biology. (*On leave of absence for the academic year.*) (1989)
- Robert Wells Johnson**, A.B. (Amherst), M.S., Ph.D. (Massachusetts Institute of Technology), Isaac Henry Wing Professor of Mathematics. (1964)
- Louis Dorrance Johnston**, B.S. (Minnesota), M.A., Ph.D. (California-Berkeley), Assistant Professor of Economics. (1990)
- Michael Jones**, A.B. (Williams), Ph.D. (Yale), Associate Professor of Economics. (1987)
- Susan Ann Kaplan**, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Associate Professor of Anthropology and Director of the Peary-MacMillan Arctic Museum and Arctic Studies Center. (*On leave of absence for the academic year.*) (1985)
- John Michael Karl**, A.B., A.M., Ph.D. (Harvard), Associate Professor of History. (1968)
- Barbara Jeanne Kaster**, A.B. (Texas Western), M.Ed. (Texas-El Paso), Ph.D. (Texas-Austin), Harrison King McCann Professor of Oral Communication in the Department of English. (*On leave of absence for the spring semester.*) (1973)
- Ann Louise Kibbie**, B.A. (Boston), Ph.D. (California-Berkeley), Assistant Professor of English. (1989)
- Thomas Charles Killion**, B.A. (California-Santa Cruz), M.A., Ph.D. (Stanford), Assistant Professor of History. (1990)

- Robert J. Knapp**, B.A. (Pomona), Ph.D. (New York), Assistant Professor of Mathematics. (1991)
- Jane Elizabeth Knox**, A.B. (Wheaton), A.M. (Michigan State), Ph.D. (Texas-Austin), Professor of Russian. (1976)
- Nancy G. Kravit**, A.B. (Columbia), M.S. (Massachusetts Institute of Technology), Ph.D. (Connecticut), Visiting Assistant Professor of Biology. (1992)
- Elroy Osborne LaCasce, Jr.**, A.B. (Bowdoin), A.M. (Harvard), Ph.D. (Brown), Professor of Physics. (1947)
- Edward Paul Laine**, A.B. (Wesleyan), Ph.D. (Woods Hole and Massachusetts Institute of Technology), Associate Professor of Geology and Director of the Environmental Studies Program. (1985)
- Peter D. Lea**, A.B. (Dartmouth), M.S. (Washington), Ph.D. (Colorado-Boulder), Assistant Professor of Geology. (*On leave of absence for the spring semester.*) (1988)
- James Spencer Lentz**, A.B. (Gettysburg), A.M. (Columbia), Coordinator of Physical Education and the Outing Club. (1968)
- Daniel Levine**, A.B. (Antioch), A.M., Ph.D. (Northwestern), Thomas Brackett Reed Professor of History and Political Science. (1963)
- Kenneth Adell Lewallen**, B.S. (Texas A&M), M.A., Ph.D. (Kansas State), Dean of Students and Lecturer in History. (1986)
- Mike Linkovich**, A.B. (Davis and Elkins), Trainer in the Department of Athletics. (1954)
- Joseph David Litvak**, A.B. (Wesleyan), M.Phil., Ph.D. (Yale), Associate Professor of English. (1982)
- Ann Akimi Lofquist**, B.F.A. (Washington University, St. Louis), M.F.A. (Indiana), Assistant Professor of Art. (1990)
- Burke O'Connor Long**, A.B. (Randolph-Macon), B.D., A.M., Ph.D. (Yale), Professor of Religion. (1968)
- Suzanne B. Lovett**, A.B. (Bowdoin), Ph.D. (Stanford), Assistant Professor of Psychology. (1990)
- Larry D. Lutchmansingh**, A.B. (McGill), A.M. (Chicago), Ph.D. (Cornell), Associate Professor of Art History. (*On leave of absence for the academic year.*) (1974)
- Irena S. M. Makarushka**, B.A. (St. John's), M.A., Ph.D. (Boston), Assistant Professor of Religion. (1990)
- Stephen Manning**, B.A. (Massachusetts-Boston), M.A., Ph.D. (Wisconsin-Madison), Visiting Assistant Professor of Government. (1991)
- Janet Marie Martin**, A.B. (Marquette), A.M., Ph.D. (Ohio State), Associate Professor of Government. (1986)

- Theodora Penny Martin**, A.B. (Middlebury), M.A.T. (Harvard), A.M. (Middlebury), Ed.D. (Harvard), Assistant Professor of Education. (1988)
- Dana Walker Mayo**, B.S. (Massachusetts Institute of Technology), Ph.D. (Indiana), Charles Weston Pickard Research Professor of Chemistry. (1962)
- O. Jeanne d'Arc Mayo**, B.S., M.Ed. (Boston), Physical Therapist and Associate Trainer in the Department of Athletics. (1978)
- Thomas E. McCabe, Jr.**, B.S., M.S. (Springfield College), Coach in the Department of Athletics. (1990)
- James Wesley McCalla**, B.A., B.M. (Kansas), M.M. (New England Conservatory), Ph.D. (California-Berkeley), Associate Professor of Music. (1985)
- Craig Arnold McEwen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Daniel B. Fayerweather Professor of Political Economy and Sociology. (1975)
- Charles Douglas McGee**, B.S., A.M. (Northwestern), Ph.D. (Harvard), Professor of Philosophy. (1963)
- Julie L. McGee**, A.B. (Bowdoin), M.A., Ph.D. (Bryn Mawr), Visiting Assistant Professor of Art History. (1992)
- John McKee**, A.B. (Dartmouth), A.M. (Princeton), Associate Professor of Art. (1962)
- Paul Joseph McLaughlin**, B.S. (Union College), M.S. (Chicago), Instructor in Sociology. (1992)
- Sarah Francis McMahon**, A.B. (Wellesley), Ph.D. (Brandeis), Associate Professor of History and Director of the Women's Studies Program. (1982)
- Terry Meagher**, A.B. (Boston), M.S. (Illinois State), Coach in the Department of Athletics. (1983)
- Raymond H. Miller**, A.B. (Indiana), A.M., Ph.D. (Harvard), Associate Professor of Russian. (1983)
- Richard Ernest Morgan**, A.B. (Bowdoin), A.M., Ph.D. (Columbia), William Nelson Cromwell Professor of Constitutional and International Law and Government. (1969)
- Jeffrey Karl Nagle**, A.B. (Earlham), Ph.D. (North Carolina), Professor of Chemistry. (1980)
- Robert Raymond Nunn**, A.B. (Rutgers), A.M. (Middlebury), Ph.D. (Columbia), Associate Professor of Romance Languages. (1959)
- Paul Luther Nyhus**, A.B. (Augsburg), S.T.B., Ph.D. (Harvard), Frank Andrew Munsey Professor of History. (1966)
- Kathleen Ann O'Connor**, A.B. (Dartmouth), A.M., Ph.D. (Virginia), Assistant Professor of German. (1987)

- Clifton Cooper Olds**, A.B. (Dartmouth), A.M., Ph.D. (Pennsylvania), Edith Cleaves Barry Professor of the History and Criticism of Art. (1982)
- Andreas Ortmann**, B.A. (University of Bielefeld, Germany), M.A. (Georgia), Ph.D. (Texas A&M), Assistant Professor of Economics. (1991)
- David Sanborn Page**, B.S. (Brown), Ph.D. (Purdue), Professor of Chemistry and Biochemistry. (1974)
- Mary Brown Parlee**, A.B. (Radcliffe), Ph.D. (Massachusetts Institute of Technology), Visiting Professor of Women's Studies on the Tallman Foundation.
- Sharon L. Pedersen**, A.B. (Harvard and Radcliffe), A.M., Ph.D. (Pennsylvania), Assistant Professor of Mathematics. (1991)
- Carey Richard Phillips**, B.S. (Oregon State), M.S. (California-Santa Barbara), Ph.D. (Wisconsin-Madison), Associate Professor of Biology. (*On leave of absence for the academic year.*) (1985)
- Edward Pols**, A.B., A.M., Ph.D. (Harvard), Research Professor of Philosophy and the Humanities. (1949)
- Christian Peter Potholm II**, A.B. (Bowdoin), M.A., M.L.D., Ph.D. (Tufts), DeAlva Stanwood Alexander Professor of Government. (1970)
- Lance Arthur Ramshaw**, B.A. (Oberlin), M.Div. (Episcopal Divinity School), M.S., Ph.D. (Delaware-Newark), Assistant Professor of Computer Science. (1990)
- James Daniel Redwine, Jr.**, A.B. (Duke), A.M. (Columbia), Ph.D. (Princeton), Edward Little Professor of the English Language and Literature. (1963)
- Marilyn Reizbaum**, A.B. (Queens College), M.Litt. (Edinburgh), Ph.D. (Wisconsin-Madison), Associate Professor of English. (*On leave of absence for the spring semester.*) (1984)
- Nancy Elizabeth Riley**, B.A. (Pennsylvania), M.A. (Hawaii), Ph.D. (Johns Hopkins), Assistant Professor of Sociology. (1992)
- Rosemary Anne Roberts**, B.A. (University of Reading), M.Sc., Ph.D. (University of Waterloo), Associate Professor of Mathematics. (1984)
- Guenther Herbert Rose**, B.S. (Tufts), M.S. (Brown), Ph.D. (California-Los Angeles), Associate Professor of Psychology and Psychobiology. (1976)
- Daniel Walter Rossides**, B.A., Ph.D. (Columbia), Professor of Sociology. (1968)
- Lynn Margaret Ruddy**, B.S. (Wisconsin-Oshkosh), Assistant Director of Athletics and Coach in the Department of Athletics. (1976)
- Abram Raymond Rutan**, A.B. (Bowdoin), M.A.F. (Yale), Director of Theater. (1955)

- Paul Eugene Schaffner**, A.B. (Oberlin), Ph.D. (Cornell), Associate Professor of Psychology. (1977)
- Elliott Shelling Schwartz**, A.B., A.M., Ed.D. (Columbia), Professor of Music. (1964)
- Carl Thomas Settlemyre**, B.S., M.S. (Ohio State), Ph.D. (North Carolina State), Associate Professor of Biology and Chemistry. (1969)
- Harvey Paul Shapiro**, B.S. (Connecticut), M.Ed. (Springfield), Coach in the Department of Athletics. (1983)
- Norean Radke Sharpe**, B.A. (Mount Holyoke), M.S. (North Carolina-Chapel Hill), Ph.D. (Virginia), Assistant Professor of Mathematics. (1989)
- Marie-Josephe Silver**, B.A. (University of Aix-en-Provence), M.Ed. (Maine-Orono), Visiting Lecturer in Romance Languages. (1992)
- Lawrence Hugh Simon**, A.B. (Pennsylvania), A.B. (Oxford), M.A./B.A. (Cambridge), Ph.D. (Boston University), Assistant Professor of Philosophy. (1987)
- Peter Slovenski**, A.B. (Dartmouth), A.M. (Stanford), Coach in the Department of Athletics. (1987)
- Melinda Yowell Small**, B.S., A.M. (St. Lawrence), Ph.D. (Iowa), Associate Professor of Psychology. (1972)
- David Neel Smith**, A.B. (Harvard), A.M., Ph.D. (California-Berkeley), Assistant Professor of Archaeology. (1987)
- G. E. Kidder Smith, Jr.**, A.B. (Princeton), Ph.D. (California-Berkeley), Associate Professor of History and Director of the Asian Studies Program. (1981)
- Nancy Snyder**, B.S. (Boston University), M.S. (Lesley College), Ed.D. (Harvard), Visiting Assistant Professor of Psychology. (1992)
- Deborah A. Soifer**, B.A. (George Washington), M.A., Ph.D. (Divinity School-Chicago), Visiting Assistant Professor of Religion. (1992)
- Philip Hilton Soule**, A.B. (Maine), Coach in the Department of Athletics. (1967)
- Allen Lawrence Springer**, A.B. (Amherst), M.A., M.A.L.D., Ph.D. (Tufts), Associate Professor of Government. (*On leave of absence for the spring semester.*) (1976)
- Randolph Stakeman**, A.B. (Wesleyan), A.M., Ph.D. (Stanford), Associate Dean for Academic Affairs, Director of the Afro-American Studies Program, and Associate Professor of History. (1978)
- William Lee Steinhart**, A.B. (Pennsylvania), Ph.D. (Johns Hopkins), Professor of Biology. (1975)

- Elizabeth A. Stemmler**, B.S. (Bates), Ph.D. (Indiana), Assistant Professor of Chemistry. (*On leave of absence for the academic year.*) (1988)
- Rajani Sudan**, B.A., M.A., Ph.D. (Cornell), Visiting Assistant Professor of English. (1990)
- Françoise Dupuy Sullivan**, Maîtrise (Université de Bordeaux), M.A. (Washington, Seattle), Ph.D. (California-Irvine), Associate Professor of Romance Languages. (*On leave of absence for the academic year.*) (1985)
- Dennis J. Sweet**, B.A. (Indiana-Bloomington), M.A., Ph.D. (Iowa), Assistant Professor of Philosophy. (1989)
- Dale Syphers**, B.S., M.Sc. (Massachusetts), Ph.D. (Brown), Associate Professor of Physics. (1986)
- Susan L. Tananbaum**, B.A. (Trinity), M.A., M.A., Ph.D. (Brandeis), Assistant Professor of History. (1990)
- Clifford Ray Thompson, Jr.**, A.B., A.M., Ph.D. (Harvard), Professor of Romance Languages. (1961)
- Peter Keim Trumper**, A.B. (St. Olaf), Ph.D. (Minnesota), Assistant Professor of Chemistry. (1985)
- Allen B. Tucker, Jr.**, A.B. (Wesleyan), M.S., Ph.D. (Northwestern), Professor of Computer Science. (*On leave of absence for the spring semester.*) (1988)
- James Henry Turner**, A.B. (Bowdoin), B.S., M.S., Ph.D. (Massachusetts Institute of Technology), Associate Professor of Physics. (1964)
- John Harold Turner**, A.M. (St. Andrews, Scotland), A.M. (Indiana), Ph.D. (Harvard), Professor of Romance Languages. (1971)
- David Jeremiah Vail**, A.B. (Princeton), M.A., M.Phil., Ph.D. (Yale), Adams-Catlin Professor of Economics. (1970)
- June Adler Vail**, A.B. (Connecticut), M.A.L.S. (Wesleyan), A. LeRoy Greason Assistant Professor of Dance and Director of Dance. (1987)
- Howard S. Vandersea**, A.B. (Bates), M.Ed. (Boston), Coach in the Department of Athletics. (1984)
- William Chace VanderWolk**, A.B. (North Carolina), A.M. (Middlebury), Ph.D. (North Carolina), Associate Professor of Romance Languages. (1984)
- James Edward Ward III**, A.B. (Vanderbilt), A.M., Ph.D. (Virginia), Dean of the College and Professor of Mathematics. (1968)
- Sidney John Watson**, B.S. (Northeastern), Ashmead White Director of Athletics. (1958)
- William Collins Watterson**, A.B. (Kenyon), Ph.D. (Brown), Professor of English. (1976)

- Susan Elizabeth Wegner**, A.B. (Wisconsin-Madison), A.M., Ph.D. (Bryn Mawr), Associate Professor of Art History. (1980)
- Marcia Anne Weigle**, A.B., A.M., Ph.D. (Notre Dame), Assistant Professor of Government. (1988) (*On leave of absence for the academic year.*)
- Allen Wells**, A.B. (SUNY-Binghamton), A.M., Ph.D. (SUNY-Stony Brook), Professor of History. (1988)
- Xiaohong Wen**, B.A. (Peking Languages Institute, Beijing), M.A., Ph.D. (Kansas-Lawrence), Assistant Professor of Chinese. (1991)
- Mark Christian Wethli**, B.F.A., M.F.A. (University of Miami), Professor of Art. (1985)
- Nathaniel Thoreau Wheelwright**, B.S. (Yale), Ph.D. (Washington), Associate Professor of Biology. (1986)
- Jean Yarbrough**, A.B. (Cedar Crest College), A.M., Ph.D. (New School for Social Research), Professor of Government. (*On leave of absence for the spring semester.*) (1988)

COMMITTEES OF THE FACULTY

Robert R. Nunn, *Faculty Clerk*

Academic Computing Center

John M. Fitzgerald, *Chair*; the Manager of the Computing Center, Judith R. Montgomery, Lance A. Ramshaw, D. Neel Smith, and Susan L. Tananbaum. *Undergraduates*: James C. Carenzo '93 and Jonathan J. Hewitt '93.

Administrative

The President, *Chair*; the Dean of the College, the Dean of Students, R. Wells Johnson, Lawrence H. Simon, Melinda Y. Small, and Dennis J. Sweet. *Undergraduates*: Feng Ding '95, William E. Stansfield '95, and Justin M. Ziegler '95.

Admissions

Steven R. Cerf, *Chair*; the Dean of Admissions, the Dean of the College, Shaheen Ayubi, Edward P. Laine, Elliott S. Schwartz, and Nathaniel T. Wheelwright. Two undergraduates and one alternate to be named.

Afro-American Studies

Daniel Levine, *Chair*; the Director of the Afro-American Studies Program, the Assistant to the President for Multicultural Programs, Stephen T. Fisk, Thomas C. Killion, James W. McCalla, and Craig A. McEwen. Five undergraduates to be named.

Asian Studies

Clifton C. Olds, *Chair*; John Calabrese, Nilanjana Chatterjee, John C. Holt, G. E. Kidder Smith, Jr., and Xiaohong Wen. Two undergraduates to be named.

Athletics

Richard E. Morgan, *Chair*; the Dean of the College, the Director of Athletics, Denis J. Corish, Deborah S. DeGraff, Kathleen A. O'Connor, and Lynn M. Ruddy. *Undergraduates*: Aileen T. Daversa '94 and Joseph W. Michaud '94. One alternate to be named.

Committee of Five

Craig A. McEwen, Paul L. Nyhus, David J. Vail, one representative from the Curriculum and Educational Policy Committee, and one representative from the Faculty Affairs Committee.

Committee on Committees

The Dean for Academic Affairs, David K. Garnick, Suzanne B. Lovett, Craig A. McEwen, Kathleen A. O'Connor, Dale Syphers, and Mark C. Wethli.

Computer Budget Committee

Raymond H. Miller, Paul E. Schaffner, and Dale Syphers.

Curriculum and Educational Policy

The Dean for Academic Affairs, *Chair*; the President, the Dean of the College, William H. Barker, Paul N. Franco, Celeste Goodridge, Louis D. Johnston, Jeffrey K. Nagle, and William C. VanderWolk. *Undergraduates*: Suzanne Gunn '93 and Richard C. Squire III '93. *Alternate*: Crystal L. Dewberry '95.

Environmental Studies

The Director of Environmental Studies, *Chair*; Susan E. Bell, A. Myrick Freeman, Edward S. Gilfillan, Lawrence H. Simon, and Nathaniel T. Wheelwright. *Undergraduates*: Heidi E. Jones '95 and two to be named.

Faculty Affairs

Franklin G. Burroughs, Jr., *Chair*; the Dean for Academic Affairs, Ronald L. Christensen (1993), Karin Dillman (1993), Ann L. Kibbie (1994), Janet M. Martin (1994), Rosemary A. Roberts (1994), and Allen Wells (1995).

Subcommittee on Diversity

John H. Turner, *Chair*; one representative from the Faculty Affairs Committee, Faith A. Perry, Marilyn Reizbaum (*fall semester*), and Randolph Stakeman.

Faculty Research

David S. Page, *Chair*; the Dean for Academic Affairs, Sara A. Dickey, Linda J. Docherty, David K. Garnick, and James L. Hodge. *Alternates*: Richard E. Morgan and William L. Steinhart.

Financial Aid and Awards

The Dean of the College, *Chair*; the Director of Student Aid, John W. Ambrose, Charles A. Grobe, Jr., Elroy O. LaCasce, Jr., James D. Redwine, Jr., C. Thomas Settlemyre, and Jean Yarbrough. *Undergraduates*: John A. E. Ghanotakis '94 and Anand R. Marri '95.

Gay and Lesbian Studies

Joseph D. Litvak, *Chair*; Steven R. Cerf, Suzanne B. Lovett, Jeffrey K. Nagle, and Paul L. Nyhus.

Grievance (Sex)

Chair of Committee on Committees, *Chair*; Barbara W. Boyd, Samuel S. Butcher, James D. Redwine, Jr., Dale Syphers, and Katharine J. Watson. *Alternates*: Joanne F. Diehl and Lance A. Ramshaw.

Human and Animal Research

John L. Howland, *Chair*; the Dean for Academic Affairs, Susan E. Bell, Patsy S. Dickinson, Peter D. Lea, John McKee, Paul E. Schaffner, Herbert Paris, and Ray S. Youmans, D.V.M.

Latin American Studies

John H. Turner, *Chair*; Janice A. Jaffe, William L. Steinhart, and Nathaniel T. Wheelwright.

Lectures and Concerts

Elliott S. Schwartz, *Chair*; Richard A. Mersereau, Barbara W. Boyd, John L. Howland, Arthur M. Hussey, June A. Vail, and William C. Watterson. *Undergraduates*: Rebecca J. Young '95 and one to be named.

Library

William C. Watterson, *Chair*; the College Librarian, Stephen A. Hall, James L. Hodge, Susan L. Tananbaum, and Peter K. Trumper. Two undergraduates to be named.

Oversight Committee on Multicultural Affairs

John H. Turner, *Chair*; the Dean of the College, D. Neel Smith, William L. Steinhart, Becky W. Thompson, and Xiaohong Wen. *Undergraduates*: Crystal L. Dewberry '95 and Anand R. Marri '95.

Recording

The Dean of the College, *Chair*; the Dean of Students, the Registrar, Gregory P. DeCoster, Robert K. Greenlee, Sharon L. Pedersen, and James H. Turner. *Undergraduates*: Richard P. Ginsberg '93 and Keri L. Saltzman '93. *Alternate*: Ameen I. Haddad '93.

Student Activities Fee

John M. Karl, *Chair*; the Student Activities Coordinator, Guenter H. Rose, Dennis J. Sweet, and Howard S. Vandersea. *Undergraduates*: Craig C. Cheslog '93 and Sheria N. Pope '95.

Student Awards

Clifford R. Thompson, Jr., *Chair*; David Collings, Gregory P. DeCoster, Ann A. Lofquist, and Norean R. Sharpe.

Student Life

The Dean of Students, *Chair*; the Student Activities Coordinator, Timothy J. Gilbride, Jane E. Knox, and James H. Turner. *Undergraduates*: Derek J. Benner '94, Ameen I. Haddad '93, Anand R. Marri '95, and Karin E. Stawarky '94.

Studies in Education

Guy T. Emery, *Chair*; David Collings, Robert J. Knapp, T. Penny Martin, Andreas Ortmann, and Melinda Y. Small. *Undergraduates*: Paige E. Jones '95 and Emily E. Platt '93.

Study Away

John H. Turner, *Chair*; Samuel S. Butcher, John M. Karl, Raymond H. Miller, Norean R. Sharpe, and Rajani Sudan.

Theater Arts

Randolph Stakeman, *Chair*; Robert K. Greenlee and Marilyn Reizbaum (*fall semester*).

Women's Studies

Marilyn Reizbaum, *Chair*; Janice A. Jaffe, Burke O. Long, Irena S. M. Makarushka, June A. Vail, Susan E. Wegner, and Sarah F. McMahon (*ex officio*). *Undergraduates*: Anne S. Kelsey '95 and Melissa C. Koch '95.

Adjunct Faculty

David Ross Anderson, B.A. (Washington University), Consortium for a Strong Minority Presence at Liberal Arts Colleges Scholar-in-Residence and Lecturer in English.

Anthony Frederick Antolini, A.B. (Bowdoin), M.A., M.A., Ph.D. (Stanford), Director of Chorale.

Rene L. Bernier, B.S. (Maine), Laboratory Instructor in Chemistry and Laboratory Support Manager.

Pamela Jean Bryer, B.S., M.S. (Rensselaer Polytechnic Institute), Laboratory Instructor in Biology.

James Davies Cambronne, B.A. (Augustana College), M.F.A. (Yale), Visiting Lecturer in Studio Art. (*Spring semester.*)

Beverly Ganter DeCoster, B.S. (Dayton), Laboratory Instructor in Chemistry.

Orlando E. Delogu, B.S. (Utah), M.S., J.D. (Wisconsin), Visiting Professor of Environmental Studies. (*Fall semester.*)

Paulette Messier Fickett, A.B. (Maine-Presque Isle), Laboratory Instructor in Chemistry.

Judith Cooley Foster, A.B. (Brown), M.Sc. (Rhode Island), Laboratory Instructor in Chemistry and Director of Laboratories.

Javier García Durán, Teaching Fellow in Spanish.

Alan Garfield, A.B. (New Hampshire), Laboratory Instructor in Biology.

Edward Smith Gilfillan III, A.B. (Yale), M.Sc., Ph.D. (British Columbia), Adjunct Professor of Chemistry and Lecturer in the Environmental Studies Program.

Christopher C. Glass, A.B. (Haverford), M.Arch. (Yale), Visiting Lecturer in Art.

Stephen Hauptman, B.A. (Connecticut College), M.A. (Illinois), M.Sc. (Cornell), Laboratory Instructor in Biology.

James A. Irish, A.B. (Bowdoin), M.Ed. (Maine-Orono), Associate in Education.

George Steven Isaacson, A.B. (Bowdoin), J.D. (Pennsylvania), Visiting Lecturer in Education. (*Fall semester.*)

Takako Ishida, B.A., M.A. (Hiroshima University), Visiting Lecturer in Japanese.

Gwyneth Jones, Teaching Fellow in Dance Performance.

Uwe Juras, Teaching Fellow in German.

Franck Le Gac, Teaching Fellow in French.

Daniel McCusker, Visiting Lecturer in Dance.

Colleen Trafton McKenna, B.A. (Southern Maine), Laboratory Instructor in Chemistry.

John Morneau, B.M. (New Hampshire), Director of Concert Band.

Rosa Pellegrini, Diploma Magistrale (Istituto Magistrale "Imbriani" Avellino), Lecturer in Italian.

John Cornelius Rensenbrink, A.B. (Calvin), A.M. (Michigan), Ph.D. (Chicago), Research Professor in Environmental Studies. (*Fall semester.*)

Celeste Ann Roberge, B.A. (Maine-Orono), B.F.A. (Portland School of Art), M.F.A. (Nova Scotia College of Art and Design), Visiting Lecturer in Studio Art. (*Fall semester.*)

David L. Roberts, A.B. (Bowdoin), Ph.D. (Case Western Reserve), Teaching Associate in Physics.

Michael Paul Roderick, A.B. (Maine), Technical Director in the Department of Theater Arts.

Paul Sarvis, Teaching Fellow in Dance Performance.

Leah G. Shulsky, M.A. (Moscow Pedagogical Institute), Teaching Fellow in Russian.

Amy Weinstein, B.A. (New College of the University of the South), M.A., Ph.D. (New York-Stony Brook), Research Associate in the Neuroscience Program.

Clarice M. Yentsch, B.S., M.S. (Winconsin-Madison), Ph.D. (Nova), Visiting Professor of Biology.

Officers of Administration

- Rhoda Zimand Bernstein**, A.B. (Middlebury), A.M. (New Mexico), Registrar Emerita.
- Kenneth James Boyer**, A.B. (Rochester), B.L.S. (New York State Library School), College Editor Emeritus.
- Robert Melvin Cross**, A.B. (Bowdoin), A.M. (Harvard), L.H.D. (Bowdoin), Secretary of the College Emeritus.
- John Stanley DeWitt**, Supervisor of Mechanical Services Emeritus.
- Margaret Edison Dunlop**, A.B. (Wellesley), Associate Director of Admissions Emerita.
- James Packard Granger**, B.S. (Boston University), C.P.A., Controller Emeritus.
- Daniel Francis Hanley**, A.B. (Bowdoin), M.D. (Columbia), Sc.D. (Bowdoin), College Physician Emeritus.
- Wolcott A. Hokanson, Jr.**, A.B. (Bowdoin), M.B.A. (Harvard), Vice President for Administration and Finance Emeritus.
- Helen Buffum Johnson**, Registrar Emerita.
- Samuel Appleton Ladd, Jr.**, B.S. (Bowdoin), Director of Career Counseling and Placement Emeritus.
- John Bright Ladley**, B.S. (Pittsburgh), M.L.S. (Carnegie Institute of Technology), Public Services Librarian Emeritus.
- Donovan Dean Lancaster**, A.B. (Bowdoin), Director of the Moulton Union and the Centralized Dining Service Emeritus.
- Thomas Martin Libby**, A.B. (Maine), Associate Treasurer and Business Manager Emeritus.
- Elizabeth Kilbride Littlefield**, Administrative Assistant to the Dean for Academic Affairs Emerita.
- Betty Mathieson Massé**, Assistant to the Treasurer Emerita.
- Arthur Monke**, A.B. (Gustavus Adolphus), M.S. in L.S. (Columbia), Librarian Emeritus.
- Geoffrey Stanwood**, B.S. (Bowdoin), Assistant to the President Emeritus.
- Kathryn Drusilla Fielding Stemper**, A.B. (Connecticut College), Secretary to the President Emerita.
- Doris Charrier Vladimiroff**, A.B. (Duke), A.M. (Middlebury), Upward Bound Project Director Emerita.
- Barbara MacPhee Wyman**, Supervisor of the Service Bureau Emerita.

GENERAL ADMINISTRATION

Robert Hazard Edwards, A.B. (Princeton), A.B., A.M. (Cambridge), LL.B. (Harvard), L.H.D. (Carleton), President of the College.

Charles R. Beitz, A.B. (Colgate), M.A. (Michigan), M.A., Ph.D. (Princeton), Dean for Academic Affairs.

Kent John Chabotar, B.A. (St. Francis), M.P.A., Ph.D. (Syracuse), Vice President for Finance and Administration and Treasurer.

Richard Alan Mersereau, A.B. (Bowdoin), M.A.T. (Wesleyan), Director of College Relations.

Richard E. Steele, B.A. (Harvard), M.A. (Vermont), Ph.D. (Wisconsin-Madison), Dean of Admissions.

Betty C. Thompson, B.A. (Northeastern State, Oklahoma), M.Ed. (Wichita State), Assistant to the President for Multicultural Programs.

William A. Torrey III, A.B., M.S.Ed. (Bucknell), Vice President for Development and Alumni Relations.

James Edward Ward III, A.B. (Vanderbilt), A.M., Ph.D. (Virginia), Dean of the College.

Cynthia P. Wonson, Executive Secretary to the President.

ACCOUNTING

Pauline Paquet Farr, Gift and Fund Accountant.

Judith Haupin, B.A. (SUNY-Albany), M.B.A. (New Hampshire), Controller.

Michelle A. McDonough, A.B. (Keuka), Chief Cashier.

Marilyn Nelson McIntyre, A.B. (Grinnell), M.P.A. (Pennsylvania State), General Ledger Supervisor.

Gail Wine, A.B. (Earlham), Restricted Fund Accountant.

ADMISSIONS

Jennifer H. Burns, A.B. (Bowdoin), Ed.M. (Harvard), Admissions Officer.

Linda M. Kreamer, B.A. (Maryland), M.L.A. (Johns Hopkins), Associate Dean.

Mitchell Alan Price, A.B. (Bowdoin), Admissions Officer.

Anne Wohltman Springer, A.B. (Bowdoin), Assistant Dean.

Holly E. Varian, A.B. (Bowdoin), Admissions Officer.

Staci E. Williams, A.B. (Bowdoin), Admissions Officer/Coordinator, Recruitment of Students of Color.

ATHLETICS

Sidney John Watson, B.S. (Northeastern), Ashmead White Director of Athletics.

John D. Cullen, A.B. (Brown), Assistant Director.

Lynn M. Ruddy, B.S. (Wisconsin-Oshkosh), Assistant Director.

AUDIOVISUAL SERVICES

Roger Doran, B.A. (Nasson), Audiovisual Coordinator.

BETHEL POINT MARINE RESEARCH STATION

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BOOKSTORE

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Ruth B. Peck, Trade Book Manager.

BRECKINRIDGE PUBLIC AFFAIRS CENTER

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Donald E. Bernier, B.A. (Maine-Portland), Chef/Resident Manager.

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Susan D. Livesay, A.B. (Smith), Associate Director.

Ann S. Pierson, A.B. (Bowdoin), Director of Programs in Teaching and Coordinator of Volunteer Services.

Laurel A. Smith, B.A. (Connecticut), M.S. (Northeastern), Career Development Counselor.

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Kenneth Cardone, A.S. (Culinary Arts and Management), Executive Chef.

Orman Hines, Purchasing Manager.

Jon Wiley, B.A. (New Hampshire), A.S. Culinary Arts (Southern Maine Technical), Operations Manager, Moulton Union.

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Pamalee J. Labbe, Administrative Assistant/Summer Programs Coordinator.

Rene L. Bernier, B.S. (Maine-Orono), Laboratory Support Manager.

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Gretchen Burleigh-Johnson, B.S.Ed. (Wheelock), Co-lead Toddler Caregiver.

Regina Fife, B.A. (Our Lady of Elms), Co-lead Infant Caregiver.

Denise Perry, A.A.Ed. (Westbrook), Co-lead Toddler Caregiver.

COLLEGE RELATIONS

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Pamela Phillips Torrey, A.B. (Princeton), Associate Director of College Relations for Programs.

Susan Lea Ransom, B.A. (Reed College), M.A. (Clark), Publications Editor.

Lucie Giegengack Teegarden, A.B. (College of New Rochelle), A.M. (Yale), Associate Director of College Relations for Communications.

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Harry J. Hopcroft, Jr., A.B. (Brown), M.B.A. (Adelphi), Systems Manager/Network Manager.

Susan T. Kellogg, B.S. (Southern Maine), Administrative Applications Coordinator.

Thaddeus Tibbetts Macy, A.B. (Maine), Manager of Systems and Communications.

Mark Ingwald Nelsen, A.B. (California-Berkeley), Special Projects Engineer.

Carol Flewelling O'Donnell, A.B. (Maine), M.B.A. (New Hampshire College), Academic User Services Coordinator.

Paul C. Petersen, B.S. (Northeastern), Administrative Applications Coordinator.

Stephen G. Smith, A.B. (Colby), M.B.A. (Maine), Manager of Administrative Computing.

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Sandra White, A.B. (Bowdoin), Psychology Intern.

Roberta Penn Zuckerman, A.B. (City College of New York), M.S.W. (Hunter College School of Social Work), Certificate in Psychotherapy (Institute for Contemporary Psychotherapy), Counselor.

DEAN FOR ACADEMIC AFFAIRS

Ann C. Ostwald, B.S.F.S. (Georgetown University School of Foreign Service), M.A. (California-Berkeley), Administrative Assistant to the Dean.

Randolph Stakeman, A.B. (Wesleyan), A.M., Ph.D. (Stanford), Associate Dean.

DEAN OF THE COLLEGE

Alice F. Yanok, Administrative Assistant to the Dean of the College.

DEAN OF STUDENTS

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Ana Marquez Brown, A.B. (Reed), M.S. (Wisconsin-Madison), Associate Dean of Students.

Douglas W. Ebeling, B.S. (Miami–Ohio), M.B.A. (Bowling Green), Area Coordinator/Advisor to Coeducational Fraternities.

Joan M. Fortin, B.A. (Colby), M.Ed. (Maine–Orono), Area Coordinator/Residential Life Programming Advisor.

William J. Fruth, A.A. (East Los Angeles), B.S. (San Diego State), A.M. (West Virginia), Director of the Moulton Union and Student Activities Coordinator.

Faith Alyson Perry, A.B. (Bowdoin), M.A. (Yale), Assistant Dean of Students.

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Betty L. Andrews, Assistant Director of Annual Giving.

Mary C. Bernier, Director of Development Services.

Grace M. J. Brescia, A.B. (Dartmouth), Director of Annual Giving.

Katharine B. Bunge, A.B. (Brown), M.A. (George Washington), Bicentennial Director.

Josiah H. Drummond, Jr., A.B. (Colby), M.Ed. (Maine), Director of Planned Giving.

Heather T. K. Hietala, A.B. (Bowdoin), Ed.M. (Harvard), Director of Alumni Relations.

Stephen P. Hyde, B.A., J.D. (Maine), Director of Corporate and Foundation Relations.

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William P. Kunitz, B.S. (Michigan State), Director of Development Information Systems.

Susan R. Moore, A.B. (Maine), M.L.S. (Syracuse), Director of Development Research.

Randolph H. Shaw, A.B. (Bowdoin), Associate Director of Annual Giving.

Harry K. Warren, A.B. (Pennsylvania), Secretary of the College.

ENVIRONMENTAL STUDIES

Helen Koulouris, B.S. (Maine), Program Coordinator.

EVENTS

Maria Karvonides, A.B. (Wheaton), Events Coordinator and Moulton Union Administrative Assistant.

**VICE PRESIDENT FOR FINANCE AND ADMINISTRATION
AND TREASURER**

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Director of Budgets.

Judith M. Coffin, Administrative Assistant to the Vice President.

Martin F. Szydlowski, B.S. (Providence College), Assistant to the
Treasurer.

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F.N.P. (Pace), Nurse Practitioner and Co-director of the Health Center.

Ian F. M. Buchan, B.A. (New Hampshire), B.S. (Oklahoma), Physician's
Assistant and Co-director of the Health Center.

Brenda M. Rice, R.T.R. (Portland), Health Center Administrator and
Radiology Technologist.

HUMAN RESOURCES

Mary E. Demers, A.B. (Bowdoin), Acting Director of Human Resources.

LANGUAGE MEDIA CENTER

Carmen M. Greenlee, Supervisor.

HAWTHORNE-LONGFELLOW LIBRARY

Sherrie S. Bergman, B.A. (Brooklyn College), M.S. in L.S. (Columbia),
Librarian.

Dianne Molin Gutscher, B.S. (Pratt Institute), C.A. (Academy of Certified
Archivists), Curator of Special Collections.

Kathleen Kenny, A.B. (Earlham), M.L.S. (Indiana), Science Librarian.

Priscilla Hubon McCarty, A.B. (Brown), M.L.S. (Maine), Catalog
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Judith Reid Montgomery, A.B. (Valparaiso), M.L.S. (Kent State), Assis-
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Leanne N. Pander, B.A. (Daemen), M.L.S. (Rhode Island), Reference
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Shirley Ann Lutz Reuter, A.B. (New Hampshire), M.L.S. (Syracuse),
Acquisitions Librarian.

- Donna Glee Sciascia**, A.B. (Emporia), M.A. in L.S. (Denver), Principal Cataloger.
- Anne Haas Shankland**, A.B. (Ohio Wesleyan), M.L.S. (Florida State), Art Librarian.
- Sydney Morgan Steinhart**, B.S. (Lebanon Valley), M.L.S. (Pittsburgh), Reference/Catalog Librarian.
- Elda Gallison Takagi**, B.S., M.A. (Maine), M.A., M.A. in L.S. (Michigan), Documents Librarian.
- Lynda Kresge Zendzian**, B.A., M.A. (Tufts), M.L.S. (Rhode Island), Acting Head, Catalog Department.

MOULTON UNION

- William J. Fruth**, A.A. (East Los Angeles), B.S. (San Diego State), A.M. (West Virginia), Director of the Moulton Union and Student Activities Coordinator.

MUSEUM OF ART

- Katharine J. Watson**, A.B. (Duke), A.M., Ph.D. (Pennsylvania), Director.
- Suzanne K. Bergeron**, B.A. (Mount Holyoke), Assistant Director for Operations.
- Helen S. Dubé**, B.S. (Syracuse), Coordinator of Education Programs.
- Kathleen V. Kelley**, B.A. (Maryland), M.A. (George Washington), Registrar.
- Isabel L. Taube**, A.B. (Bowdoin), Andrew W. Mellon Foundation Curatorial Intern.

MUSIC

- Barbara Lillian Whitepine**, A.B. (Colby), Administrative Assistant.

PAYROLL SERVICES

- Charles R. Trudeau**, B.A. (Massachusetts-Amherst), Director of Payroll Services.

PEARY-MACMILLAN ARCTIC MUSEUM AND ARCTIC STUDIES CENTER

- Susan Ann Kaplan**, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Director.

Gerald Frederick Bigelow, A.B. (Columbia College), Ph.D. (Cambridge),
Curator/Registrar.

PHYSICAL PLANT

David Newton Barbour, B.S. (Maine), M.B.A. (Southern Maine),
Director.

Ann D. Goodenow, Assistant Director for Grounds and Housekeeping.

George E. Libby, Assistant Director for Maintenance.

Richard C. Parkhurst, B.A. (St. Francis), Assistant Director for Administrative Services.

George S. Paton, B.S. (Massachusetts-Amherst), Associate Director and
Campus Engineer.

REGISTRAR

Sarah Jane Bernard, B.S. (Bates), C.M.A. (Laban Institute of Movement
Studies), Registrar.

SECURITY

Donna M. Loring, B.A. (Maine-Orono), Certificate (Maine Criminal
Justice Academy), Chief of Security.

SERVICE BUREAU

Mark Schmitz, A.A.S. (Monroe Community College), A.A.S. (Cayuga
County Community College), Supervisor of the Service Bureau.

STUDENT AID

Walter Henry Moulton, A.B. (Bowdoin), Director.

Stephen H. Joyce, B.A. (Williams College), Ed.M. (Harvard), Assistant
Director.

UPWARD BOUND

Helen E. Pelletier, A.B. (Bowdoin), M.A. (Georgetown), Project Director.

Thomas J. Putnam, A.B. (Bowdoin), M.P.A. (Princeton), Assistant
Director.

Kenneth E. Hoppie, A.B. (Dennison), Administrative Assistant.

WOMEN'S RESOURCE CENTER

Janice E. Brackett, B.S. (Cornell), Women's Resource Center Coordinator.

WOMEN'S STUDIES PROGRAM

Jananne Kay Phillips, A.B. (Washburn), A.M. (Brown), Women's Studies Program Administrator.

GENERAL COLLEGE COMMITTEES**Bias Incident Group**

Robert H. Edwards, *Chair*; James E. Ward, Kenneth A. Lewallen, David N. Barbour, Richard A. Mersereau, Donna M. Loring, Lance A. Ramshaw, Susan L. Tananbaum, Betty C. Thompson, and Robert C. Vilas. *Undergraduate*: Emily E. Platt '93.

Board on Sexual Harassment and Assault

Patsy S. Dickinson, *Chair*; Scott W. Hood, Burke O. Long, and Ruth B. Peck. *Alternates*: Linda J. Docherty, Joseph D. Litvak, Anne W. Springer, and Martin F. Szydlowski. *Undergraduates*: Jenna H. Burton '94 and Andrew I. Wells '93.

Bowdoin Administrative Staff Steering Committee

Lynda K. Zendzian, *Chair*; Suzanne K. Bergeron, Helen S. Dube, Carmen M. Greenlee, Stephen H. Joyce, Marilyn F. McIntyre, Betty C. Thompson, and Richard A. Mersereau, Director of College Relations (*ex officio*).

Bowdoin Bicentennial Committee

The Steering Committee: Merton G. Henry, *Chair*; Rosalyn S. Bernstein, Paul P. Broutas, Katharine B. Bunge, Tracy J. Burlock, Herbert S. French, Jr., Gordon F. Grimes, Barbara J. Kaster, Molly Hoagland King, Edward P. Laine, Cynthia G. McFadden, Richard A. Mersereau, Robert H. Millar, Clifton C. Olds, Susan B. Ravdin, A. Raymond Rutan, Sanford R. Sistare, William A. Torrey.

Environmental, Historic, and Aesthetic Impact Committee

C. Michael Jones, *Chair*; Edward P. Laine, John McKee, and A. Raymond Rutan. *Undergraduates*: Emily S. Flannigan '94, Timothy M. Smith '94, and two to be named.

Appendix:

Prizes and Distinctions

THE BOWDOIN PRIZE: This fund was established as a memorial to William John Curtis 1875, LL.D. '13, by his wife and children. The prize, four-fifths of the total income not to exceed \$10,000, is to be awarded "once in each five years to the graduate or former member of the College, or member of its faculty at the time of the award, who shall have made during the period the most distinctive contribution in any field of human endeavor. The prize shall only be awarded to one who shall, in the judgment of the committee of award, be recognized as having won national and not merely local distinction, or who, in the judgment of the committee, is fairly entitled to be so recognized." (1928)

The first award was made in 1933 and the most recent in 1990. The recipient in 1985 was Joan Benoit Samuelson '79. Joint recipients of the award in 1990 were Professors Dana W. Mayo and Samuel S. Butcher.

THE PRESERVATION OF FREEDOM FUND: Gordon S. Hargraves '19 established this fund to stimulate understanding and appreciation of the rights and freedoms of the individual, guaranteed under the Constitution of the United States. The prize is to be awarded to a student, member of the faculty, or group of Bowdoin alumni making an outstanding contribution to the understanding and advancement of human freedoms and the duty of the individual to protect and strengthen these freedoms at all times. (1988)

The first award was made in 1988 to William B. Whiteside, Frank Munsey Professor of History Emeritus. Recipients of the award in 1989 were Senators William S. Cohen '62, LL.D. '75, and George J. Mitchell, Jr. '54, LL.D. '83. The recipient of the award in 1991 was Ernst C. Helmreich, Thomas Brackett Reed Professor of History and Political Science Emeritus.

PRIZES IN GENERAL SCHOLARSHIP

Abraxas Award: An engraved pewter plate is awarded to the school sending two or more graduates to the College, whose representatives maintain the highest standing during their first year. This award was established by the Abraxas Society. (1915)

James Bowdoin Day: Named in honor of the earliest patron of the College, James Bowdoin Day was instituted in 1941 to accord recognition to those undergraduates who distinguish themselves in scholarship. Inaugurated by Stanley Perkins Chase '05, Henry Leland Chapman Professor of English Literature (1925–51), the exercises consist of the announcement of awards, the presentation of books, a response by an undergraduate, and an address. The James Ware Bradbury Debating Prize is awarded to the competitors for the student speaker at James Bowdoin Day exercises. The first prize is for the speaker; the second prize is divided among the other competitors.

The James Bowdoin Scholarships, carrying no stipend, are awarded to undergraduates who have completed at least the equivalent of two four-credit semesters at Bowdoin. The scholarships are determined on the basis of a student's entire record at Bowdoin. In the year preceding the award, a student must have been actively engaged in full-time academic work, and at least one of the semesters must have been at Bowdoin. For a student to be named a James Bowdoin Scholar, three-quarters of his

or her grades (computed on the basis of full-course equivalents) must be A/HH or B/H, with at least one-quarter of them A/HH. In addition, there must be two grades of A/HH for each grade of C/P. Students who have received grades of D or F are ineligible.

A book, bearing a replica of the early College bookplate serving to distinguish the James Bowdoin Collection in the library, is presented to every undergraduate who has carried a full course program and has received a grade of A/HH in each of his or her courses during the last academic year.

Brooks-Nixon Prize Fund: The annual income of a fund established by Percy Willis Brooks 1890 and Mary Marshall Brooks is awarded each year as a prize to the best Bowdoin candidate for selection as a Rhodes scholar. (1975)

Brown Memorial Scholarships: This fund, for the support of four scholarships at Bowdoin College, was given by the Honorable J. B. Brown, of Portland, in memory of his son, James Olcott Brown 1856, A.M. 1859. According to the provisions of this foundation, a prize will be paid annually to the best scholar in each undergraduate class who shall have graduated at the high school in Portland after having been a member thereof not less than one year. The awards are made by the city of Portland upon recommendation of the College. (1865)

Dorothy Haythorn Collins Award: This award, given by Dorothy Haythorn Collins and her family to the Society of Bowdoin Women, is used to honor a student "who has achieved academic and general excellence in his or her chosen major" at the end of the junior year. Each year the society selects a department from the sciences, social studies, or humanities. The selected department chooses a student to honor by purchasing books and placing them with a nameplate in the department library. The student also receives a book and certificate of merit. (1985)

Almon Goodwin Prize Fund: This fund was established by Mrs. Maud Wilder Goodwin in memory of her husband, Almon Goodwin 1862. The annual income is awarded to a member of Phi Beta Kappa chosen by vote of the Board of Trustees of the College at the end of the recipient's junior year. (1906)

George Wood McArthur Prize: This fund was bequeathed by Almira L. McArthur, of Saco, in memory of her husband, George Wood McArthur 1893. The annual income is awarded as a prize to that member of the graduating class who, coming to Bowdoin as the recipient of a prematriculation scholarship, shall have attained the highest academic standing among such recipients within the class. (1950)

Phi Beta Kappa: The Phi Beta Kappa Society, national honorary fraternity for the recognition and promotion of scholarship, was founded at the College of William and Mary in 1776. The Bowdoin chapter (Alpha of Maine), the sixth in order of establishment, was founded in 1825. Election is based primarily on scholarly achievement, and consideration is given to the student's entire college record. Students who have studied away are expected to have a total academic record, as well as a Bowdoin record, that meets the standards for election. Nominations are made three times a year, usually in September, February, and May. The total number of students selected in any year does not normally exceed ten percent of the number graduating in May. Students elected to Phi Beta Kappa are expected to be persons of integrity and good moral character. Candidates must have completed at least twenty-four semester courses of college work, including at least sixteen courses at Bowdoin.

Leonard A. Pierce Memorial Prize: This prize, established by friends and associates of Leonard A. Pierce '05, A.M. H'30, LL.D. '55, is awarded annually to that member

of the graduating class who is continuing his or her education in an accredited law school and who attained the highest scholastic average during his or her years in college. It is paid to the recipient upon enrollment in law school. (1960)

COMMENCEMENT PRIZES

DeAlva Stanwood Alexander Prize: Established by DeAlva Stanwood Alexander 1870, A.M. 1873, LL.D. '07, this fund furnishes two prizes for excellence in select declamation. (1906)

Class of 1868 Prize: Contributed by the Class of 1868, this prize is awarded for a written and spoken oration by a member of the senior class. (1868)

Goodwin Commencement Prize: Established by the Reverend Daniel Raynes Goodwin 1832, A.M. 1835, D.D. 1853, the prize is awarded for a written or oral presentation at Commencement. (1882)

DEPARTMENTAL PRIZES

Afro-American Studies

Lennox Foundation Book Prize: This fund was established by the Lennox Foundation and Jeffrey C. Norris '86. An appropriate book is awarded to a student graduating in Afro-American Studies. (1990)

Art

Art History Junior-Year Prize: This prize, funded annually by a donor wishing to remain anonymous, is awarded to a student judged by the Department of Art to have achieved the highest distinction in the major program in art history and criticism at the end of the junior year. (1979)

Art History Senior-Year Prize: This prize, established by a donor wishing to remain anonymous, is awarded to a graduating senior judged by the Department of Art to have achieved the highest distinction in the major in art history and criticism. (1982)

Anne Bartlett Lewis Memorial Fund: This fund was established by Anne Bartlett Lewis's husband, Henry Lewis, and her children, William H. Hannaford, David Hannaford, and Anne D. Hannaford. The annual income of the fund is used for demonstrations of excellence in art history and creative visual arts by two students enrolled as majors in the Department of Art. (1981)

Richard P. Martel, Jr., Memorial Fund: This prize is awarded annually to the Bowdoin undergraduate who, in the judgment of the studio art faculty, is deemed to have produced the most creative, perceptive, proficient, and visually appealing art work exhibited at the College during the academic year. (1990)

Biology

Copeland-Gross Biology Prize: This prize, named in honor of Manton Copeland and Alfred Otto Gross, Sc.D. '52, both former Josiah Little Professors of Natural Science, is awarded to that graduating senior who has best exemplified the idea of a liberal education during the major program in biology. (1972)

Donald and Harriet S. Macomber Prize in Biology: This fund was established by Dr. and Mrs. Donald Macomber in appreciation for the many contributions of Bowdoin in the education of members of their family—David H. Macomber '39, Peter B. Macomber '47, Robert A. Zottoli '60, David H. Macomber, Jr. '67, Steven J. Zottoli

'69, and Michael C. Macomber '73. The income of the fund is to be awarded annually as a prize to the outstanding student in the Department of Biology. If, in the opinion of the department, in any given year there is no student deemed worthy of this award, the award may be withheld and the income for that year added to the principal of the fund. (1967)

James Malcolm Moulton Prize in Biology: This fund was established by former students and other friends in honor of the George Lincoln Skolfield, Jr., Professor of Biology to provide a book prize to be awarded annually to the outstanding junior majoring in biology, as judged by scholarship and interest in biology. At the discretion of the Department of Biology, this award may be made to more than one student or to none in a given year. (1984)

Chemistry

Philip Weston Meserve Fund: This prize was established in memory of Professor Philip Weston Meserve '11, "to be used preferably to stimulate interest in Chemistry." (1941)

Classics

Hannibal Hamlin Emery Latin Prize: This prize, established in honor of her uncle, Hannibal Hamlin Emery 1874, by Persis E. Mason, is awarded to a member of the junior or senior class for proficiency in Latin. (1922)

Nathan Goold Prize: This prize, established by Abba Goold Woolson, of Portland, in memory of her grandfather, is awarded to that member of the senior class who has, throughout the college course, attained the highest standing in Greek and Latin studies. (1922)

Sewall Greek Prize: This prize, given by Jotham Bradbury Sewall 1848, S.T.D. '02, formerly professor of Greek in the College, is awarded to the member of the sophomore class who sustains the best examination in Greek. (1879)

Sewall Latin Prize: This prize, also given by Professor Sewall, is awarded to the member of the sophomore class who sustains the best examination in Latin. (1879)

Economics

Noyes Political Economy Prize: This prize, established by Crosby Stuart Noyes, A.M. H1887, is awarded to the best scholar in political economy. (1897)

English

Brown Competition Prizes: Two prizes from the annual income of a fund established by Philip Greely Brown 1877, A.M. 1892, in memory of Philip Henry Brown 1851, A.M. 1854, are offered to members of the senior class for excellence in extemporaneous English composition. (1874)

Hiland Lockwood Fairbanks Prize Fund: This fund was established by Captain Henry Nathaniel Fairbanks, of Bangor, in memory of his son, Hiland Lockwood Fairbanks 1895. The annual income is awarded as first and second prizes to the two outstanding students in English 50. (1909)

Hawthorne Prize: The income of a fund given in memory of Robert Peter Tristram Coffin '15, Litt.D. '30, Pierce Professor of Literature, and in memory of the original founders of the Hawthorne Prize, Nora Archibald Smith and Kate Douglas Wiggin, Litt.D. '04, is awarded each year to the author of the best short story. This competition is open to members of the sophomore, junior, and senior classes. (1903)

Nathalie Walker Llewellyn Commencement Poetry Prize: This prize, established by and named for the widow of Dr. Paul Andrew Walker '31, is awarded to the Bowdoin student who, in the opinion of the Department of English, shall have submitted the best work of original poetry. The prize may take the form of an engraved medal, an appropriate book, or a cash award. The name of the recipient is announced at Commencement. (1990)

Horace Lord Piper Prize: This prize, established by Sumner Increase Kimball 1855, Sc.D. 1891, in memory of Maj. Horace Lord Piper 1863, is awarded to that member of the sophomore class who presents the best "original paper on the subject calculated to promote the attainment and maintenance of peace throughout the world, or on some other subject devoted to the welfare of humanity." (1923)

Stanley Plummer Prizes: The annual income of a fund established by Stanley Plummer 1867 is awarded to the two outstanding students in English 52, Electronic Film Production. First and second prizes are awarded in a two-to-one ratio. (1919)

Poetry Prize: The annual income of a fund established by Gian Raoul d'Este-Palmieri II '26 is given each semester for the best poem written by an undergraduate. (1926)

Pray English Prize: A prize given by Dr. Thomas Jefferson Worcester Pray 1844 is awarded to the best scholar in English literature and original English composition. (1889)

Forbes Rickard, Jr., Poetry Prize: A prize, given by a group of alumni of the Bowdoin chapter of Alpha Delta Phi Fraternity in memory of Forbes Rickard, Jr. '17, who lost his life in the service of his country, is awarded to the undergraduate writing the best poem. (1919)

David Sewall Premium: This prize is awarded to a member of the first-year class for excellence in English composition. (1795)

Mary B. Sinkinson Short Story Prize: A prize, established by John Hudson Sinkinson '02 in memory of his wife, Mary Burnett Sinkinson, is awarded each year for the best short story written by a member of the junior or senior class. (1961)

Bertram Louis Smith, Jr., Prize: The annual income of a fund established by his father in memory of Bertram Louis Smith, Jr. '03, to encourage excellence of work in English literature is awarded by the department to a member of the junior class who has completed two years' work in English literature. Ordinarily, the prize is given to a student majoring in English, and performance of major work as well as record in courses is taken into consideration. (1925)

German

The Old Broad Bay Prizes in Reading German: The income from a fund given by Jasper J. Stahl '09, Litt.D. '60, and by others is awarded to students who, in the judgment of the department, have profited especially from their instruction in German. The fund was established as a living memorial to those remembered and unremembered men and women from the valley of the Rhine who in the eighteenth century founded the first German settlement in Maine at Broad Bay, now Waldoboro. (1964)

The German Consular Prize in Literary Interpretation: This prize was initiated by the German Consulate, from whom the winner receives a certificate of merit and a book prize, in addition to a small financial prize to be awarded from the income of the fund. The prize is awarded annually to the senior German major who wins a competition requiring superior skills in literary interpretation. (1986)

Government and Legal Studies

Philo Sherman Bennett Prize Fund: This fund was established by William Jennings Bryan from trust funds of the estate of Philo Sherman Bennett, of New Haven, Connecticut. The income is used for a prize for the best essay discussing the principles of free government. Competition is open to juniors and seniors. (1905)

Jefferson Davis Award: A prize consisting of the three-volume *Jefferson Davis* by Hudson Strode and the annual income of a fund is awarded to the student excelling in constitutional law. (1973)

Fessenden Prize in Government: A prize given by Richard Dale '54 is awarded by the Department of Government to that graduating senior who as a government major has made the greatest improvement in studies in government, who has been accepted for admission into either law or graduate school or has been accepted for employment in one of certain federal services, and who is a United States citizen. (1964)

History

Class of 1875 Prize in American History: A prize established by William John Curtis 1875, LL.D. '13, is awarded to the student who writes the best essay and passes the best examination on some assigned subject in American history. (1901)

Dr. Samuel and Rose A. Bernstein Prize in History: This prize, given by Roger K. Berle '64, is awarded annually to that student who has achieved excellence in the study of European history. (1989)

James E. Bland History Prize: The income of a fund established by colleagues and friends of James E. Bland, a member of Bowdoin's Department of History from 1969 to 1974, is awarded to the Bowdoin undergraduate, chosen by the history department, who has presented the best history honors project not recognized by any other prize at the College. (1989)

Mathematics

Edward Sanford Hammond Mathematics Prize: A book is awarded on recommendation of the Department of Mathematics to a graduating senior who is completing a major in mathematics with distinction. Any balance of the income from the fund may be used to purchase books for the department. The prize honors the memory of Edward S. Hammond, for many years Wing Professor of Mathematics, and was established by his former students at the time of his retirement. (1963)

Smyth Mathematical Prize: This prize, established by Henry Jewett Furber 1861 in honor of Professor William Smyth, is given to that student in each sophomore class who obtains the highest grades in mathematics courses during the first two years. The prize is awarded by the faculty of the Department of Mathematics, which will take into consideration both the number of mathematics courses taken and the level of difficulty of those courses in determining the recipient. The successful candidate receives one-third of the prize at the time the award is made. The remaining two-thirds is paid to him or her in installments at the close of each term during junior and senior years. If a vacancy occurs during those years, the income of the prize goes to the member of the winner's class who has been designated as the alternate recipient by the department. (1876)

Music

Sue Winchell Burnett Music Prize: This prize, established by Mrs. Rebecca P. Bradley in memory of Mrs. Sue Winchell Burnett, is awarded upon recommendation of the Department of Music to that member of the senior class who has majored in

music and has made the most significant contribution to music while a student at Bowdoin. If two students make an equally significant contribution, the prize will be divided equally between them. (1963)

Philosophy

Philip W. Cummings Philosophy Prize: This prize, established by Gerard L. Dube '55 in memory of his friend and classmate, is awarded to the most deserving student in the Department of Philosophy. (1984)

Physics

Edwin Herbert Hall Physics Prize: This prize, named in honor of Edwin Herbert Hall 1875, A.M. 1878, LL.D. '05, the discoverer of the Hall effect, is awarded each year to the best sophomore scholar in the field of physics. (1953)

Noel C. Little Prize in Experimental Physics: This prize, named in honor of Noel C. Little '17, Sc.D. '67, professor of physics and Josiah Little Professor of Natural Science, is awarded to a graduating senior who has distinguished himself or herself in experimental physics. (1968)

Psychology

Frederic Peter Amstutz Memorial Prize Fund: This prize, established in memory of Frederic Peter Amstutz '85 by members of his family, is awarded to a graduating senior who has achieved distinction as a psychology major. (1986)

Religion

Edgar Oakes Achorn Prize Fund: The income of a fund established by Edgar Oakes Achorn 1881 is awarded as a prize for the best essay written by a member of the second- or first-year classes in Religion 101. (1932)

Lea Ruth Thumim Biblical Literature Prize: This prize, established by Carl Thumim in memory of his wife, Lea Ruth Thumim, is awarded each year by the Department of Religion to the best scholar in biblical literature. (1959)

Romance Languages

Philip C. Bradley Spanish Prize: This prize, established by classmates and friends in memory of Philip C. Bradley '66, is awarded to outstanding students in Spanish languages and literature. (1982)

Goodwin French Prize: This prize, established by the Reverend Daniel Raynes Goodwin 1832, A.M. 1835, D.D. 1853, is awarded to the best scholar in French. (1890)

Eaton Leith French Prize: The annual income of a fund, established by James M. Fawcett III '58 in honor of Eaton Leith, professor of Romance languages, is awarded to that member of the sophomore or junior class who, by his or her proficiency and scholarship, achieves outstanding results in the study of French literature. (1962)

Charles Harold Livingston Honors Prize in French: This prize, established by former students of Charles Harold Livingston, Longfellow Professor of Romance Languages, upon the occasion of his retirement, is awarded to encourage independent scholarship in the form of honors theses in French. (1956)

Science

Sumner Increase Kimball Prize: This prize, established by Sumner Increase Kimball 1855, Sc.D. 1891, is awarded to that member of the senior class who has "shown the most ability and originality in the field of the Natural Sciences." (1923)

Sociology and Anthropology

Matilda White Riley Prize in Sociology and Anthropology: This prize, established in honor of Matilda White Riley, Sc.D. '72, Daniel B. Fayerweather Professor of Political Economy and Sociology Emerita, who established the joint Department of Sociology and Anthropology and a tradition of teaching through sociological research, is awarded for an outstanding research project by a major. (1987)

Elbridge Sibley Sociology Prize Fund: Established by Milton M. Gordon '39, the prize is awarded to the member of the senior class majoring in sociology or anthropology who has the highest general scholastic average in the class at the midpoint of each academic year. (1989)

Theater Arts

Abraham Goldberg Prize: Established by Abraham Goldberg, this prize is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of designing or directing. (1960)

Alice Merrill Mitchell Prize: This prize, established by Wilmot Brookings Mitchell 1890, A.M. '07, L.H.D. '38, Edward Little Professor of Rhetoric and Oratory, in memory of his wife, Alice Merrill Mitchell, is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of acting. (1951)

William H. Moody '56 Prize: Established in memory of Bill Moody, who for many years was the theater technician and friend of countless students, this award is presented annually, if applicable, to one or more sophomores, juniors, or seniors having made outstanding contributions to the theater through technical achievements accomplished in good humor. The award should be an appropriate memento of Bowdoin. (1980)

Bowdoin Dance Group Award: An appropriate, inscribed dance memento is awarded annually to an outstanding senior for contributions of dedicated work, good will, and talent, over the course of his or her Bowdoin career, in the lively, imaginative spirit of the Class of 1975, the first graduating class of Bowdoin dancers. (1988)

Scholarship Award for Summer Study in Dance: A monetary award toward tuition costs at an accredited summer program of study in dance is given to a first-year student with demonstrated motivation and exceptional promise in dance technique or choreography, whose future work in dance, upon return, will enrich the Bowdoin program. (1988)

UNDERGRADUATE RESEARCH ASSISTANCE

Surdna Foundation Undergraduate Research Fellowship Program: An undergraduate research fellowship program established in 1959 was renamed in 1968 the Surdna Foundation Undergraduate Research Fellowship Program in recognition of two gifts of the Surdna Foundation. The income from a fund, which these gifts established, underwrites the program's costs. Fellowships may be awarded annually to highly qualified seniors. Each Surdna Fellow participates under the direction of a faculty member in a research project in which the faculty member is independently interested.

The purpose is to engage the student directly in a serious attempt to extend knowledge. Each project to which a Surdna Fellow is assigned must therefore justify itself independently of the program, and the fellow is expected to be a participant in the research, not a mere observer or helper. The nature of the project differs from discipline to discipline, but all should give the fellow firsthand acquaintance with productive scholarly work. Should the results of the research be published, the faculty member in charge of the project is expected to acknowledge the contribution of the Surdna Fellow and of the program.

Surdna Fellows are chosen each spring for the following academic year. Awards are made on the basis of the candidate's academic record and departmental recommendation, his or her particular interests and competence, and the availability at the College of a research project commensurate with his talents and training. Acceptance of a Surdna Fellowship does not preclude working for honors, and the financial need of a candidate does not enter into the awarding of fellowships. Surdna Fellows are, however, obligated to refrain from employment during the academic year. The stipend is \$1,600 for part-time research during the academic year or full-time research in eight weeks of the summer. There are eight awards annually.

Alfred O. Gross Fund: This fund, established by Alfred Otto Gross, Sc.D. '52, Josiah Little Professor of Natural Science, and members of his family, is designed to assist worthy students in doing special work in biology, preferably ornithology. Income from the fund may be used for such projects as research on Kent Island, travel to a given region or library for particular work, purchase of special apparatus, attendance at an ornithological congress or other scholarly gatherings, and publication of the results of research. Although the fund is administered by Bowdoin College, assistance from the fund is not limited to Bowdoin students.

Fritz C. A. Koelln Research Fund: This fund was established in 1972 by John A. Gibbons, Jr. '64, to honor Fritz C. A. Koelln, professor of German and George Taylor Files Professor of Modern Languages, who was an active member of the Bowdoin faculty from 1929 until 1971. The income from the fund may be awarded annually to a faculty-student research team to support exploration of a topic which surmounts traditional disciplinary boundaries. The purpose of the fund is to encourage broad, essentially humanistic inquiry, and should be awarded with preference given to worthy projects founded at least in part in the humanities.

Edward E. Langbein, Sr., Summer Research Grant: An annual gift of the Bowdoin Parents' Fund is awarded under the direction of the president of the College to undergraduates or graduates to enable the recipients to participate in summer research or advanced study directed toward their major field or lifework. Formerly the Bowdoin Fathers Association Fund, the grant was renamed in 1970 in memory of a former president and secretary of the association.

AWARDS IN ATHLETICS

Women's Basketball Alumnae Award: A bowl, inscribed with the recipient's name, is given to the player who "best exemplifies the spirit of Bowdoin's Women's Basketball, combining talent with unselfish play and good sportsmanship." The award is presented by Bowdoin alumnae basketball players. (1983)

The Bowdoin College No. 1 Fan Award: Given by the varsity men's hockey players in the Class of 1988, this award is presented annually to a fan of Bowdoin men's

hockey, unrelated to a playing member of the team, whose qualities of enthusiasm, loyalty, and support are judged to be especially outstanding. The recipient will be selected by vote of the head coach, the director of athletics, and the members of the team. The recipient's name will be engraved on the permanent trophy, and he or she will receive a replica. (1988)

Society of Bowdoin Women Athletic Award: This award is presented each May to a member of a women's varsity team in recognition of her "effort, cooperation, and sportsmanship." Selection is made by a vote of the Department of Athletics and the dean of students. (1978)

Leslie A. Claff Track Trophy: This trophy, presented by Leslie A. Claff '26, is awarded "at the conclusion of the competitive year to the outstanding performer in track and field athletics who, in the opinion of the dean, the director of athletics, and the track coach, has demonstrated outstanding ability accompanied with those qualities of character and sportsmanship consistent with the aim of intercollegiate athletics in its role in higher education." (1961)

Annie L. E. Dane Trophy: Named in memory of the wife of Francis S. Dane 1896 and mother of Nathan Dane II '37, Winkley Professor of Latin Language and Literature, the trophy is awarded each spring to a senior member of a varsity women's team who "best exemplifies the highest qualities of character, courage, and commitment to team play." (1978)

Francis S. Dane Baseball Trophy: This trophy, presented to the College by friends and members of the family of Francis S. Dane 1896, is awarded each spring "to that member of the varsity baseball squad who, in the opinion of a committee made up of the dean of the College, the director of athletics, and the coach of baseball, best exemplifies high qualities of character, sportsmanship, and enthusiasm for the game of baseball." (1965)

William J. Fraser Basketball Trophy: This trophy, presented by Harry G. Shulman, A.M. H'71, in memory of William J. Fraser '54, is awarded annually to that member of the basketball team who best exemplifies the spirit of Bowdoin basketball. The recipient is selected by the coach, the director of athletics, and the dean of the College. (1969)

Winslow R. Howland Football Trophy: This trophy, presented to the College by his friends in memory of Winslow R. Howland '29, is awarded each year to that member of the varsity football team who has made the most marked improvement on the field of play during the football season, and who has shown the qualities of cooperation, aggressiveness, enthusiasm for the game, and fine sportsmanship so characteristic of Winslow Howland. (1959)

Elmer Longley Hutchinson Cup: This cup, given by the Bowdoin chapter of Chi Psi Fraternity in memory of Elmer Longley Hutchinson '35, is awarded annually to a member of the varsity track squad for high conduct both on and off the field of sport. (1969)

J. Scott Kelnberger Memorial Ski Trophy: The trophy is presented by the family and friends in honor and memory of J. Scott Kelnberger '83. (1985)

Samuel A. Ladd Tennis Trophy: This trophy, presented by Samuel Appleton Ladd, Jr. '29, and Samuel Appleton Ladd III '63, is awarded to a member of the varsity team who, by his sportsmanship, cooperative spirit, and character, has done the most for

tennis at Bowdoin during the year. The award winner's name is inscribed on the trophy. (1969)

Mortimer F. LaPointe Lacrosse Award: This award, given in honor of Coach Mortimer F. LaPointe's 21 seasons as coach of men's lacrosse by his alumni players, is presented to one player on the varsity team, who, through his aggressive spirit, love of the game, and positive attitude, has helped build a stronger team. The coach will make the final selection after consultation with the captains and the dean of students. (1991)

George Levine Memorial Soccer Trophy: This trophy, presented by Lt. Benjamin Levine, coach of soccer in 1958, is awarded to that member of the varsity soccer team exemplifying the traits of sportsmanship, valor, and desire. (1958)

The Maine Track Officials' Trophy: This trophy is given annually by the friends of Bowdoin track and field to that member of the women's team who has demonstrated outstanding qualities of loyalty, sportsmanship, and character during her athletic career at Bowdoin. The recipient of the award is chosen by a vote of the head track coaches and the men's and women's track team. (1989)

Robert B. Miller Trophy: This trophy, given by former Bowdoin swimmers in memory of Robert B. Miller, coach of swimming, is awarded annually "to the Senior who, in the opinion of the coach, is the outstanding swimmer on the basis of his contribution to the sport." Winners will have their names inscribed on the trophy and will be presented with bronze figurines. (1962)

Hugh Munro, Jr., Memorial Trophy: This trophy, given by his family in memory of Hugh Munro, Jr. '41, who lost his life in the service of his country, is inscribed each year with the name of that member of the Bowdoin varsity hockey team who best exemplifies the qualities of loyalty and courage which characterized the life of Hugh Munro, Jr. (1946)

Paul Nixon Basketball Trophy: Given to the College by an anonymous donor and named in memory of Paul Nixon, L.H.D. '43, dean at Bowdoin from 1918 to 1947, in recognition of his interest in competitive athletics and sportsmanship, this trophy is inscribed each year with the name of the member of the Bowdoin varsity basketball team who has made the most valuable contribution to this team through his qualities of leadership and sportsmanship. (1959)

Wallace C. Philoon Trophy: Given by Maj. Gen. Wallace Copeland Philoon, USA, '05, M.S. '44, this trophy is awarded each year to a non-letter winner of the current season who has made an outstanding contribution to the football team. The award is made to a man who has been faithful in attendance and training and has given his best efforts throughout the season. (1960)

Christian P. Potholm II Soccer Award: Given to the College by Christian P. Potholm II '62, DeAlva Stanwood Alexander Professor of Government, and Sandra Q. Potholm, this fund supports annual awards to the male and female scholar/athlete whose hard work and dedication have been an inspiration to the Bowdoin soccer program. Selection of the recipients is decided by the coaching staff. The award is in the form of a plaque inscribed with the recipient's name, the year, and a description of the award. (1992)

Sandra Quinlan Potholm Swimming Trophy: Established by Sandra Quinlan Potholm and Christian P. Potholm II '62, DeAlva Stanwood Alexander Professor of Government, this prize is awarded annually to the male and female member of the

Bowdoin swimming teams who have done the most for team morale, cohesion, and happiness. Selection of the recipients is decided by the coaching staff. The award is in the form of a plaque inscribed with the recipient's name, the year, and a description of the award. (1992)

William J. Reardon Memorial Football Trophy: A replica of this trophy, which was given to the College by the family and friends of William J. Reardon '50, is presented annually to a senior on the varsity football team who has made an outstanding contribution to his team and his college as a man of honor, courage, and ability, the qualities which William J. Reardon exemplified at Bowdoin College on the campus and on the football field. (1958)

Reid Squash Trophy: Established by William K. Simonton '43, this trophy is awarded annually to the member of the squash team who has shown the most improvement. The recipient is to be selected by the coach of the team, the director of athletics, and the dean of the College. (1975)

Colonel Edward A. Ryan Award: Given by friends and family of Colonel Ryan, longtime starter at the College track meets, this award is presented annually to that member of the women's track and field team who has distinguished herself through outstanding achievement and leadership during her four-year athletic career at Bowdoin. (1989)

Harry G. Shulman Hockey Trophy: This trophy is awarded annually to that member of the hockey squad who has shown outstanding dedication to Bowdoin hockey. The recipient is elected by a vote of the coach, the director of athletics, and the dean of the College. (1969)

Lucy L. Shulman Trophy: Given by Harry G. Shulman, A.M. H'71, in honor of his wife, this trophy is awarded annually to the outstanding woman athlete. The recipient is selected by the director of athletics and the dean of the College. (1975)

Ellen Tiemer Trophy: This trophy, donated to the women's lacrosse program from funds given in memory of Ellen Tiemer's husband, Paul Tiemer '28, who died in 1988, is to be awarded annually "to a senior or junior woman who is judged to have brought the most credit to Bowdoin and to herself." The recipient is to be selected by a vote of the team and the coach. (1990)

Paul Tiemer Men's Lacrosse Trophy: This award, established in memory of Paul Tiemer '28, is to be presented annually to the player who is judged to have shown the greatest improvement and team spirit over the course of the season. Only one award shall be made in a year, and the recipient is to be selected by a vote of the men's varsity lacrosse team. (1990)

Paul Tiemer, Jr., Men's Lacrosse Trophy: Given by Paul Tiemer '28 in memory of his son, Paul Tiemer, Jr., this trophy is awarded annually to the senior class member of the varsity lacrosse team who is judged to have brought the most credit to Bowdoin and to himself. The recipient is selected by the varsity lacrosse coach, the director of athletics, and the dean of the College. (1976)

Christopher Charles Watras Memorial Women's Ice Hockey Trophy: This trophy is dedicated in the memory of Chris Watras '85, former assistant women's ice hockey coach. The award is presented annually to that member of the Bowdoin women's varsity ice hockey team who best exhibits the qualities of sportsmanship, leadership, commitment, and dedication to her teammates and the sport, on the ice as well as in

the community and the classroom. The recipient is selected by the women's varsity ice hockey coach and the director of athletics. Her name is engraved on the permanent trophy and she receives a replica at the team's annual award ceremony. (1989)

Women's Ice Hockey Founders' Award: This award is presented to the player who exemplifies the qualities of enthusiasm, dedication, and perseverance embodied in the spirited young women who were paramount in the establishment of Bowdoin women's hockey. The recipient is selected by vote of her fellow players. (1991)

PRIZES IN EXTRACURRICULAR ACTIVITIES

James Bowdoin Cup: This cup, given by the Alpha Rho Upsilon Fraternity, is awarded annually on James Bowdoin Day to the student who in his previous college year has won a varsity letter in active competition and has made the highest scholastic average among the students receiving varsity letters. In case two or more students should have equal records, the award shall go to the one having the best scholastic record during his or her college course. The name of the recipient is to be engraved on the cup. (1947)

Bowdoin Orient Prize: Six cash prizes are offered by the Bowdoin Publishing Company and are awarded each spring to those members of the *Bowdoin Orient* staff who have made significant contributions to the *Orient* in the preceding volume. (1948)

General R. H. Dunlap Prize: The annual income of a fund established by Katharine Wood Dunlap in memory of her husband, Brig. Gen. Robert H. Dunlap, USMC, is awarded to the student who writes the best essay on the subject of "service," in addition to demonstrating personal evidence of service. (1970)

Andrew Allison Haldane Cup: This cup, given by fellow officers in the Pacific in memory of Capt. Andrew Allison Haldane, USMCR, '41, is awarded to a member of the senior class who has outstanding qualities of leadership and character. (1945)

Orren Chalmer Hormell Cup: This cup, given by the Sigma Nu Fraternity at the College in honor of Orren Chalmer Hormell, D.C.L. '51, DeAlva Stanwood Alexander Professor of Government, is awarded each year to a sophomore who, as a first-year student, competed in first-year athletic competition as a regular member of a team, and who has achieved outstanding scholastic honors. A plaque inscribed with the names of all the cup winners is kept on display. (1949)

Lucien Howe Prize: Fifty percent of the income of a fund given by Dr. Lucien Howe 1870, A.M. 1879, Sc.D. '10, is awarded by the faculty to members of the senior class who as undergraduates, by example and influence, have shown the highest qualities of conduct and character. The remainder is expended by the president to improve the social life of the undergraduates. (1920)

Masque and Gown Figurine: A figurine, *The Prologue*, carved by Gregory Wiggins, is presented annually to the author of the prize-winning play in the One-Act Play contest, and is held by the winner until the following contest. (1937)

Masque and Gown One-Act Play Prizes: Prizes are awarded annually for excellence in various Masque and Gown activities, including playwriting, directing, and acting. (1934)

George H. Quinby Award: Established in honor of "Par" Quinby, for thirty-one years director of dramatics at Bowdoin College, by his former students and friends in

Masque and Gown, this award is presented annually to one or more first-year members of Masque and Gown who make an outstanding contribution through interest and participation in Masque and Gown productions. The recipients are selected by the director of theater, the theater technician, and the president of Masque and Gown. (1967)

Franklin Delano Roosevelt Cup: This cup, furnished by the Bowdoin chapter of Alpha Delta Phi Fraternity, is inscribed annually with the name of that member of the three lower classes whose vision, humanity, and courage most contribute to making Bowdoin a better college. (1945)

Paul Andrew Walker Prize Fund: This fund was established in honor and memory of Paul Andrew Walker '31 by his wife, Nathalie L. Walker. Forty percent of the income of the fund is used to honor a member or members of the *Bowdoin Orient* staff whose ability and hard work are deemed worthy by the Award Committee chosen by the dean of the College. A bronze medal or an appropriate book, with a bookplate designed to honor Paul Andrew Walker, is presented to each recipient. (1982)

MISCELLANEOUS FUNDS

The Applied Environmental Science Fund: This fund, established in 1981 by gifts from Robert C. Porter '34, LL.D. '86, the Ivy Fund, Suburban Propane Gas Corporation, March & McLennan Companies, Inc., and Eberstadt Asset Management, Inc., is to be used to support the research and instructional program of the Marine Research Laboratory and the Hydrocarbon Research Center.

Faculty Development Fund: The income of this fund, established by Charles Austin Cary '10, A.M. H'50, LL.D. '63, is expended each year "for such purpose or purposes, to be recommended by the President and approved by the Governing Boards, as shall be deemed to be most effective in maintaining the caliber of the faculty." These purposes may include, but not be limited to, support of individual research grants, productive use of sabbatical leaves, added compensation for individual merit or distinguished accomplishment, other incentives to encourage individual development of teaching capacity, and improvement of faculty salaries.

Faculty Research Fund: This fund, founded by the Class of 1928 on the occasion of its twenty-fifth anniversary, is open to additions from other classes and individuals. The interest from the fund is used to help finance research projects carried on by members of the faculty.

Sidney B. Karofsky Prize for Junior Faculty: This prize, given by members of the Karofsky family, is to be conferred annually by the dean for academic affairs in consultation with the Faculty Affairs Committee on the basis of student evaluations of teaching. Those considered include faculty members in their third year of service whose appointments have been renewed. The award is to be made to an outstanding Bowdoin teacher who "best demonstrates the ability to impart knowledge, inspire enthusiasm, and stimulate intellectual curiosity." In 1992 the award was made to Assistant Professor of English Ann L. Kibbie.

Campus and Buildings

BOWDOIN COLLEGE IS LOCATED in Brunswick, Maine, a town of approximately 20,900, first settled in 1628, on the banks of the Androscoggin River, a few miles from the shores of Casco Bay. The campus, originally a sandy plain covered with blueberries and pines, is a tract of 110 acres containing more than fifty buildings and several playing fields.

The central quadrangle is ringed by the College's oldest and most important buildings. To the north is **Massachusetts Hall** (1802), the oldest college building in Maine, which houses the Departments of English and Philosophy. In the early years of the College, it housed the students, and all classes met there. Now used for classes and faculty offices, the building was designated a Registered Historical Landmark in 1971. The entire campus became part of the Federal Street Historic District in 1976. To the left of Massachusetts Hall is **Memorial Hall**, built to honor alumni who served in the Civil War but not finished until 1882. Inside Memorial Hall, theatrical productions, lectures, and concerts take place in **Pickard Theater**, a fully equipped proscenium stage that seats 600. The G.H.Q. Playwrights' Theater is located in the basement.

To the west are the **Mary Frances Searles Science Building** (1894), housing the Departments of Biology and Physics; the **Visual Arts Center** (1975), which contains offices, classrooms, studios, and exhibition space for the Department of Art and Kresge Auditorium; the **Walker Art Building** (1894), designed by McKim, Mead & White, which houses the Bowdoin College Museum of Art; and the **Harvey Dow Gibson Hall of Music** (1954). Visible through the southwest corner of the quadrangle is **Hawthorne-Longfellow Hall** (1965), the east side of which is the College's library, including the Special Collections suite on the third floor, and the west side of which houses the main administrative offices for the campus.

On the south side of the quad is **Hubbard Hall** (1903), once the College's library and now the site of the Peary-MacMillan Arctic Museum and Arctic Studies Center, the Departments of History, Government, and Geology, the Computing Center, and the Susan Dwight Bliss Room, where a small collection of rare illustrated books can be seen by appointment. The back wing of Hubbard Hall is connected to the library by an underground passage and contains stacks and a study room.

On the east side of the quad is a row of six historic brick buildings, five dormitories (south to north: **Coleman** [1958], **Hyde** [1917], **Appleton** [1843], **Maine** [1808], and **Winthrop** [1822] halls) and **Seth Adams Hall** (1861), a classroom building for the Departments of Mathematics and Computer Science. In the center of this row is the **Chapel**, designed by Richard Upjohn and built from 1845 to 1855, a Romanesque church of undressed granite with twin towers and spires that rise to a height of 120 feet. The

Department of Psychology occupies **Banister Hall**, the section of the Chapel building originally used for the College's library and art collection.

Behind the dormitories are two secondary quadrangles divided by an athletic complex that includes **Morrell Gymnasium** (1965), **Sargent Gymnasium** (1912), **General Thomas Worcester Hyde Athletic Building** (1912), the **Curtis Pool Building** (1927), and **Dayton Arena** (1956). **Whittier Field**, **Hubbard Grandstand** (1904), and the **John Joseph Magee Track** are across Sills Drive through the pines behind Dayton Arena. The Curtis Pool Building now houses faculty offices.

To the left of this cluster of athletic buildings is the **Hatch Science Library**, the College's newest building, opened for the 1991 spring term; **Parker Cleaveland Hall** (1952), the chemistry building, which is named for a nineteenth-century Bowdoin professor and pioneer in geological studies; and **Sills Hall** (1950), home to the Departments of German, Romance Languages, and Russian, an electronic film production laboratory, and the Language Media Center. One wing of Sills Hall, **Smith Auditorium**, seats 210 for films and performances.

To the right of the athletic buildings is a quadrangle dominated by the **Moulton Union** (1928), a social, recreational, and service center for the College. It contains dining facilities and several lounges, the reception and information center, a game room, the Moulton Union Bookstore, a travel agency, student mailboxes, and the Events, Career Services, and Student Activities offices. Also in this quadrangle are **Moore Hall** (1941), a dormitory, and the **Dudley Coe Health Center** (1917). Student health care offices are on the first and second floors of the health center, the Counseling Service is on the third, and the Service Bureau is in the basement.

Another cluster of buildings, across College Street on the south side of the campus, includes the College's tallest building and one of its oldest. **Little-Mitchell House** (1827), once a duplex shared by two nineteenth-century professors, was opened in 1970 as a center for Afro-American studies. Named in honor of Bowdoin's first African-American graduate, the John Brown Russwurm African-American Center houses the offices of the Afro-American Studies Program, a reading room, and a 1,600-volume library of African and African-American source materials.

The center stands in front of sixteen-story **Coles Tower** (1964), which provides student living and study quarters, seminar and conference rooms, lounges, and accommodations for official guests of the College. Connected to the tower are **Wentworth Hall**, a dining hall with smaller meeting and conference facilities on the second floor and **Daggett Lounge**, a large room where receptions, readings, and meetings are held. **Chamberlain Hall**, the third side of the Coles Tower complex, houses the Admissions Office and the Student Aid Office.

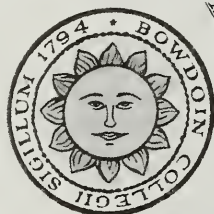
Separated from the campus proper are various athletic, residential, and support buildings. The largest of these is the athletic complex two blocks south

of Coles Tower. Here are the **William Farley Field House** (1987) and the new sixteen-lane swimming pool, **Pickard Field House** (1937), eight outdoor tennis courts, Pickard Field, the **Observatory**, and 35 acres of playing fields.

Various offices occupy buildings around the perimeter of the campus, many of them in historic houses donated by townspeople and former members of the faculty. The Asian Studies Program and the Department of Religion occupy **38 College Street**. The **Women's Resource Center**, at 24 College Street, headquarters of the Women's Studies Program and the Bowdoin Women's Association, includes a library and meeting rooms. **Johnson House** (1849), on Maine Street, named for Henry Johnson, a distinguished member of the faculty, and Mrs. Johnson, was designated a registered Historical Landmark in 1975. **Chase Barn Chamber**, located in the Johnson House ell, contains a small stage and fireplace and is used for small classes, performances, seminars, and conferences. **Ashby House** (1845–1855), next to Johnson House, is occupied by the Department of Sociology and Anthropology. **Ham House**, on Bath Street, is headquarters for Bowdoin's Upward Bound Program. **Getchell House**, next door, is home to the Office of College Relations. **Rhodes Hall**, formerly the Bath Street Primary School, houses the offices of the Departments of Physical Plant and Security and a few faculty offices. The former home of Bowdoin's presidents, **85 Federal Street** (1860), was converted in 1982 for the use of the Development and Annual Giving offices. **Cram Alumni House** (1857), next door to 85 Federal, is the center of alumni activities at Bowdoin. The former residence of Professor Parker Cleaveland (1806), at 75 Federal Street, has been acquired by the College for use as a new President's House. The offices of the *Bowdoin Orient* are located at **12 Cleaveland Street**.

Fraternity houses and student residences, many of them in historic houses, are located on the residential streets around the campus. **Baxter House**, designed by Chapman and Frazer and built by Hartley C. Baxter, of the Class of 1878; the **Brunswick Apartments**, on Maine Street, which provide housing for about 100 juniors and seniors and townspeople; **Burnett House**, built in 1858 and for many years the home of Professor and Mrs. Charles T. Burnett; **10 Cleaveland Street**; **30 College Street**; **Copeland House**, formerly the home of Manton Copeland, professor of biology from 1908 until 1947; the **Harpwell Street** and **Pine Street Apartments**, designed by Design Five Maine and opened in the fall of 1973; **238 Maine Street**, formerly the Alpha Rho Upsilon fraternity house; the **Mayflower Apartments**, at 14 Belmont Street, about two blocks from the campus; and the **Winfield Smith House**, named in memory of L. Winfield Smith, of the Class of 1907, are all College-owned student residences.

The architecture and history of the campus are thoroughly discussed in *The Architecture of Bowdoin College* (Brunswick: Bowdoin College Museum of Art, 1988), by Patricia McGraw Anderson, which is for sale at the College Bookstore and in the Museum Shop in the Walker Art Building.



CANTON STREET

To Harpswell
HARPSWELL ROAD

Pickard Field

Harpswell Street
Apartment

Warehouse

Tennis Courts

LONGFELLOW AVENUE

CHAMBERLAIN AVENUE

Smith House

McLELLAN STREET

HARPSWELL STREET

HARPSWELL PL.

Alpha Kappa Sigma

38 College

30 College

Newman Center

Childrens C
24 Colleg
(Women's Res
Center)

BOWKER STREET

Whittier
Field

COLLEGE STREET

Coe Health
Center

Moore Hall

Ayde Athletic Bldg

Dayton Arena

Morrell
Gymnasium

Cleveland
Hall

Heating
Plant

Hatch
Science
Library

Smith
Auditorium

Sills Hall

← To Bath

Parking

85
Federal

Crom Alumni
House

Bowdoin
Pines

margaret campbell 1964

FEDERAL STREET

Copeland
House

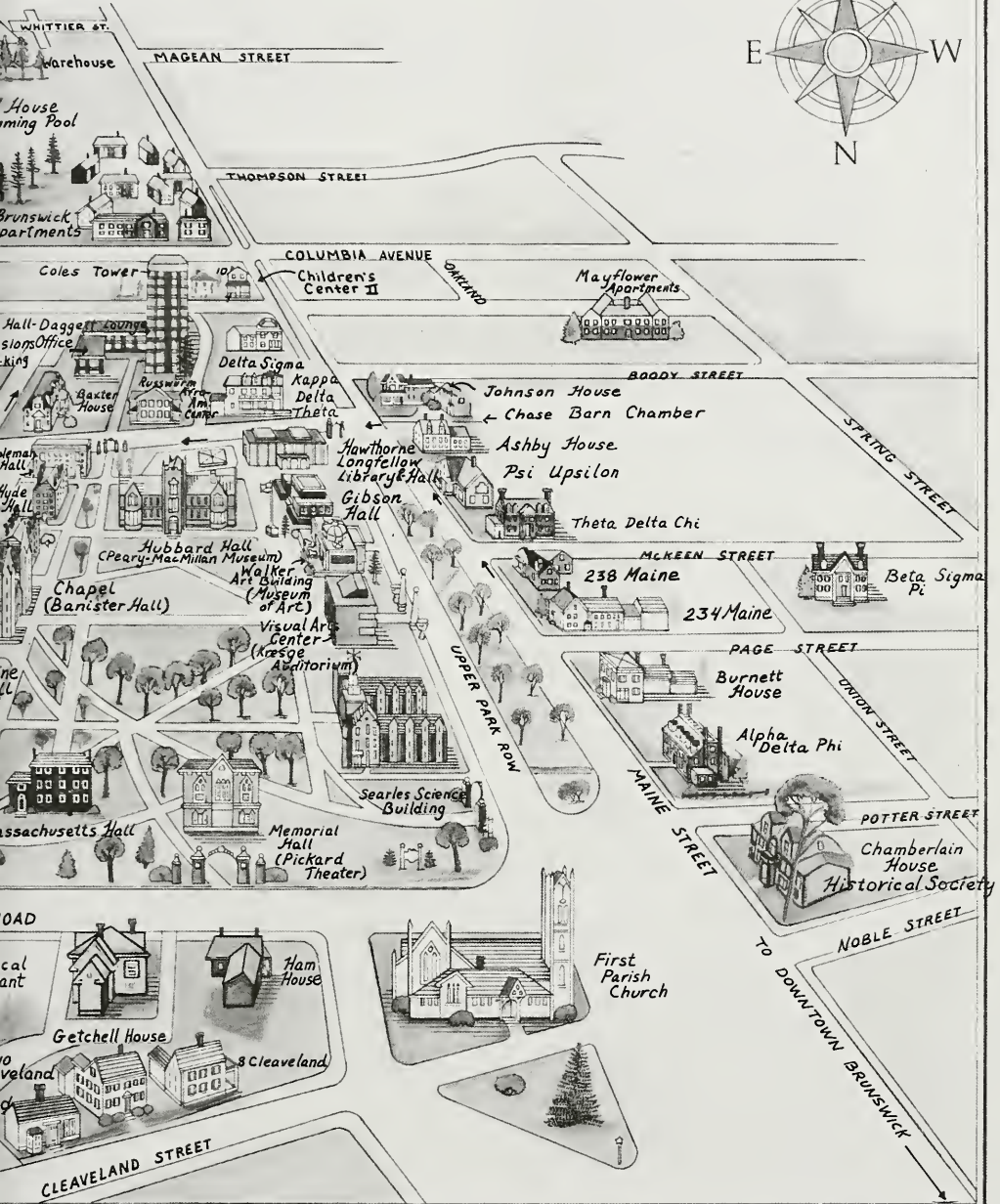
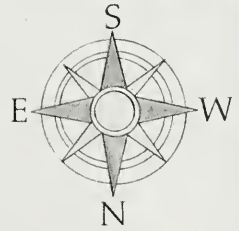
Rhodes
Hall

Secur

84-86
Federal

18
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16
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General Information

Bowdoin is an independent, nonsectarian, coeducational, residential, undergraduate, liberal arts college located in Brunswick, Maine, a town of 20,900 situated close to the Maine coast, 25 miles from Portland and about 120 miles from Boston.

Terms and Vacations: The College holds two sessions each year. The dates of the semesters and the vacation periods are given in the College Calendar on pages vi–viii.

Enrollment: The student body numbers about 1,400 students (56 percent male, 44 percent female; last two classes 52/48 percent and 51/49 percent); about 200 students study away one or both semesters annually; 90 percent complete the degree within five years.

Faculty: Student/faculty ratio 11:1; the equivalent of 130 full-time faculty in residence, 95 percent with Ph.D. or equivalent; 18 athletic coaches and trainers.

Geographic Distribution in Entering Class of 1996: New England, 46 percent; Middle Atlantic states, 22 percent; West, 11 percent; South, 9 percent; Midwest, 7 percent; international, 5 percent. Forty-two states, one U.S. territory, and 14 countries are represented. Minority and international enrollment is 15 percent.

Statistics: As of June 1992, 27,966 students have matriculated at Bowdoin College, and 20,905 degrees in courses have been awarded. In addition, earned master's degrees have been awarded to 274 postgraduate students. Living alumni include 12,666 graduates, 1,900 nongraduates, 91 honorary graduates, and 262 graduates in the specific postgraduate programs.

Offices and Office Hours: The Admissions Office is located in Chamberlain Hall. General administration and business offices are located in Hawthorne-Longfellow Hall, the west end of the Nathaniel Hawthorne-Henry Wadsworth Longfellow Library. The Development and Alumni Relations offices are located at 83 and 85 Federal Street. The Office of Career Services is in the Moulton Union. The Counseling Service is in the Dudley Coe Health Center. The Department of Physical Plant is in Rhodes Hall.

In general, the administrative offices of the College are open from 8:30 A.M. to 5:00 P.M., Monday through Friday.

Telephone Switchboard: The College's central telephone switchboard is located in Coles Tower. All College phones are connected to this switchboard. The number is (207) 725-3000.

BOWDOIN COLLEGE
Brunswick, Maine 04011
(207) 725-3000

DEAN OF ADMISSIONS
BOWDOIN COLLEGE
BRUNSWICK, MAINE 04011

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